BRITISH MEDICAL JOURNAL:

BEING THE JOURNAL OF THE BRITISH MEDICAL ASSOCIATION.

EDITED BY ANDREW WYNTER, M.D.

No. CLXXIII.] LONDON: SATURDAY, APRIL 21, 1860. [NEW SERIES.

A Course of Lectures
ON
URINE, URINARY DEPOSITS, AND CALCULI.

DELIVERED AT THE PATHOLOGICAL LABORATORY, DURING THE SESSION 1857-58.

BY

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LECTURE V.

URINE IN DISEASE. SOLUBLE SUBSTANCES PRESENT IN URINE IN DISEASE WHICH DO NOT EXIST IN THE HEALTHY SECRETION. ALBUMEN. *Of Detecting the Presence of Albumen; Tests; Nitric Acid; Heat; Anomalous Results in Employing these Tests; Apparent Presence of Albumen in Urine which contains none; Phosphate resembling Albumen; Uric Acid resembling Albumen; Cases. Apparent Absence of Albumen in Urine which contains a large Quantity; Cases. Cause of the Precipitation of Albumen by Heat being prevented by a Trace of Nitric Acid. Other Tests for Albumen. On Estimating the Quantity of Albumen. Peculiar Substance in Urine allied to Albumen. Of the Importance of Albumen in Urine in a Clinical point of view. Dropsy in Disease of the Kidney.* BILE. *Tests. Nitric Acid. Heller's Test. Pettenkofer's Test. Yellow Colour of the Cells, etc., in the Urinary Deposit. On Estimating the Quantity of the Biliary Acids in Urine.* SUGAR. *General Characters of the Urine in Diabetes. Diabetic Sugar. Tests for Diabetic Sugar; Moore's Test; Trommer's Test; Barreswill's and other Solutions. On Testing for Sugar when only Traces are present. Circumstances interfering with the Action of Trommer's Test. Of the Yeast Test. Maumené's or the Perchloride of Tin Test. Bismuth Test. Of Estimating the Quantity of Sugar; volumetrically; by Fermentation; by Dr. Garrod's Method; by the Polarising Saccharimeter. Circumstances under which Sugar is excreted in the Urine. Analyses of Urine in Diabetes.* OTHER SOLUBLE SUBSTANCES WHICH ARE NOT PRESENT IN HEALTH. LEUCINE. TYROSINE. INOSITE. ACETONE. CYSTINE.

GENTLEMEN,—We will now pass on to the consideration of certain soluble substances not found in healthy urine, the presence of which is to be ascertained by the application of *chemical tests*. In many cases, however, our first suspicion of the existence of one of these bodies is excited by certain peculiar characters affecting the deposit or the colour of the urine, or by its peculiar smell or unusually high specific gravity. The substances referred to, being perfectly soluble in the fluid, cannot be detected by microscopical examination; but, in many instances, we infer their presence from the microscopical characters of certain bodies in the deposit. Thus, the detection of epithelial cells of a yellowish colour would lead us to test the urine for *biliary colouring matter;* if casts were found upon microscopical examination of the deposit, we should test for *albumen;* if torulæ were present, we should suspect the presence of *sugar*. In all cases, our conclusions must be verified by the application of appropriate tests, which we shall presently consider.

The most important soluble substances present in the urine in disease, but absent in the healthy secretion, are, *albumen, biliary constituents,* and *sugar*. The clinical importance of these is so great, that they deserve your special attention.

Albumen. The occurrence of albumen in the urine has been regarded as a most important pathological fact ever since the connexion between dropsy and disease of the kidneys was established by Dr. Bright. Albumen, it need scarcely be said, is absent from the urine of healthy persons, although now and then it may be detected for a short period of time in the urine of individuals who are not suffering from any serious or permanent derangement of the health. The presence of albumen must always be regarded by the physician as a point of serious importance, although at the same time, *per se*, it cannot be taken as evidence of the existence of any organic lesion, unless it has been clearly detected from day to day for a certain time. Many of the causes which give rise to the escape of serum from the vessels in other parts of the body, independent of disease, will determine its transudation through the walls of the renal capillaries, and, as a matter of course, it will be found in the urine.

To recognise with certainty the presence of a substance in the urine having so important a bearing in the discovery and interpretation of certain morbid processes, as albumen, is obviously a point of the utmost importance to the practitioner. In the examination of the urine of patients, simple tests are at once applied, in order to determine if this substance be present or absent. In the majority of cases, such information is easily obtained; but occasionally an instance occurs in which, without great care, an erroneous conclusion is likely to be arrived at after the ordinary tests have been applied. As this question is one of very great practical importance, and of much interest, I propose to consider it at somewhat greater length than is usual in works devoted to the clinical examination of urine. The reactions to which I shall refer are not imaginary, but have actually occurred; and I have known instances in which albumen was stated to be absent when the urine contained a large quantity; and other specimens have fallen under my notice, which, although they really contained none, yielded a precipitate having many of the characters of albumen. Let us then investigate the phenomena *seriatim*.

TESTS FOR ALBUMEN IN URINE.

1. *Albumen is usually precipitated from its solution upon the addition of a few drops of nitric acid.* Heller recommended that the acid should be allowed to flow to the bottom of the tube containing the urine. In this manner, three strata are formed, the lowest stratum consisting of the pure acid, above which is the precipitated albumen, while the upper stratum consists of the fluid containing the albumen uncoagulated.

2. *Albumen is also generally coagulated by the application of heat* (140° to 167° Fahr.). If very dilute, a higher temperature is required. The best way of testing urine by heat is the following:—An ordinary test-tube is about half filled with the urine, and is to be held by the lower part. Heat is applied to a point near the *surface* of the fluid; the tube being shaken a little at the time, to prevent the glass being cracked. The slightest precipitate cannot fail to be observed, as the fluid below remains perfectly unchanged. When urates are present, this plan is very useful, as we get three distinct strata; the upper one formed of coagulated albumen; the next clear, in consequence of the solution of the urates at a temperature somewhat below that necessary for the coagulation of the albumen; and lastly, the unchanged urates.

3. *If the solution of albumen be alkaline, no precipitate will be produced by heat. We are, therefore, generally directed to neutralise the alkali by an acid before heat is applied.* If excess of acid be added, the albumen is, of course, precipitated in the insoluble form, without the application of heat.

Frequently specimens of urine are met with which exhibit one or more of the following peculiarities, which tend either to make us believe that albumen is present when it is not, or cause us to conclude that it is absent when the urine contains it.

1. Upon the application of heat, the specimen may become turbid, in consequence of the precipitation of phosphate. The reaction of the urine in this case would generally be neutral or feebly alkaline; but sometimes urine depositing

phosphate on the application of heat is of a decidedly acid reaction (Lecture III).

2. Upon the addition of nitric acid, the specimen becomes turbid, in consequence of the decomposition of the urates held in solution in the urine, and the deposition of uric acid in a granular state. If the acidified urine be boiled, it usually becomes clear with the development of a pinkish or brown colour, consequent upon the decomposition of the uric acid.

3. Upon adding nitric acid to some specimens of urine of high specific gravity, an abundant precipitate of a crystalline character is produced. This consists of nitrate of urea, and is easily recognised by its crystalline character. It seldom appears immediately, and is hardly likely to be mistaken for albumen, except by a most superficial observer.

4. After adding a drop or two of nitric acid to urine suspected to contain albumen, in order to render it distinctly acid, *no precipitate is produced upon boiling, although a large quantity of albumen may be present.* This is constant in all specimens of albuminous urine, and shows the importance of never boiling urine suspected to contain albumen in a tube which may contain, by accident, a drop or two of nitric acid.

5. Cubebs, copaiba, and some other resinous substances, taken internally, are said to give rise to precipitates in the urine which are liable to be mistaken for albumen.

A Precipitate produced in Urine containing no Albumen.

Phosphate resembling Albumen. The precipitate of phosphates is very readily distinguished from albumen by its solubility in a little acid. Upon the addition of a few drops of nitric acid, the turbidity instantly disappears, and the solution becomes perfectly clear.

Uric Acid resembling Albumen. When a precipitate of uric acid in a minute state of division is caused in consequence of the decomposition of the urates by nitric acid, its nature may be ascertained by allowing the mixture to stand for some time, when the minute granules gradually increase in size, and at length become crystals, the nature of which is at once recognised upon microscopical examination. In some cases, the crystals may be seen to form under the microscope. This precipitation of uric acid on adding nitric acid often leads to mistakes, and albumen is stated to be present in urine which really does not contain a trace. Several cases of this precipitate have occurred to myself, and I have heard of many others in the practice of friends. It has happened in the wards of our hospital, that the precipitate produced by nitric acid has been inferred by the clinical clerk to consist of albumen, when subsequently no precipitate could be obtained. The fallacy was explained by careful examination afterwards.

Dr. G. O. Rees has met with urine affording this precipitate of uric acid on the addition of nitric acid in cases of typhoid fever. Most of the instances which I have met with occurred in cases of liver-affection. I extract two or three, as examples.

Urine from a Patient suffering from large Hydatid Tumours of the Liver. A small quantity of the urine was filtered, and, upon the addition of a little nitric acid, a precipitate was produced. After standing a little while, this was examined by the microscope, and found to consist of minute crystals of uric acid. These were dissolved upon the application of heat; but, as the solution cooled, they were deposited again in the form of much larger crystals.

A specimen of urine exhibiting the same peculiarity contained excess of urea. Upon the addition of half its bulk of nitric acid, the mixture became nearly solid, from the formation of crystals of nitrate of urea. The deposit in this instance consisted partly of urate of soda.

Another example, of which I have kept notes, occurred in a man aged 49, suffering from *rheumatic fever.* The urine was acid, specific gravity 1027, and contained much urate of soda. The practitioner who first saw the case boiled a portion of the urine. It remained clear; and he said, therefore, that it contained no albumen. A physician afterwards tested a portion of the same urine with nitric acid; and, finding that an abundant precipitate was produced, affirmed that much albumen was present. The deposit produced by nitric acid was found, by subsequent examination, to be dissolved by heat; and, when a portion was examined in the microscope, its true nature was decided by the presence of numerous uric acid crystals.

No Precipitate produced in Urine containing Albumen.

Albumen not coagulated by heat when a little nitric acid is present. Upon the careful addition of a drop of nitric acid, the precipitate at first formed when the acid comes in contact with the urine, slowly dissolves as it descends towards the bottom. Upon boiling this *acidified solution, no precipitate of albumen will take place.* Upon the further addition, however, of nitric acid, the albumen is precipitated.

This reaction has often led to mistakes. Not unfrequently albuminous urine has been poured into a test-tube which contained a trace of the nitric acid remaining from some previous experiment; and, upon boiling the mixture under these circumstances, no precipitate of albumen has occurred. If a few drops of a dilute solution of nitric acid be added to a portion of albuminous urine in a test-tube, and the mixture boiled, no precipitate will take place. In fact, the addition of a little dilute nitric acid will prevent the coagulation of albumen by heat. Dr. Bence Jones was, I believe, the first to explain this fact, in a communication to the editor of the *Medical Gazette* (vol. xxvii, p. 289); and, so far as I can ascertain, no other explanation for the circumstance than that offered by him has been given. Dr. Jones thinks that the solution of albumen is owing to the formation of a nitrate of albumen which is soluble in a weak solution of nitric acid, even although boiling, but insoluble in a mixture of acid of moderate strength. Dr. Bence Jones has also shown that albumen is not always precipitated from very acid urine upon the application of heat. From some experiments I have made, however, I have been led to conclude that the above result depends upon the decomposition of the phosphates by the nitric acid, and the consequent development of free phosphoric acid in which acid albumen is freely soluble. This view has been confirmed by some experiments which I made some time since on the subject, and which have since been many times repeated. A weak solution of albumen was treated with a few drops of chloride of calcium, and afterwards with a little ammonia. After having stood for twenty-four hours, it was filtered. In this manner, any soluble phosphates present were removed. The solution was then tested as follows:—

1. Albumen was precipitated by the application of heat, or by the addition of nitric acid, as usually occurs.

2. A very small quantity of dilute nitric acid did not prevent the coagulation of the albumen by heat.

3. After the addition of a few drops of phosphoric acid, the fluid no longer coagulated upon being boiled.

Some of the same solution as the above, which had not been treated with chloride of calcium and ammonia, afforded the same results upon the application of the tests as other albuminous solutions. A few drops of a weak solution of nitric acid, or a little phosphoric acid, prevented the precipitation of the albumen by heat. The addition of phosphoric acid to an albuminous solution, or a soluble phosphate and a little nitric acid, prevented the precipitation of the albumen by heat.

These results, therefore, led me to conclude that a trace of nitric acid prevents the coagulation of a moderately strong solution of albumen by heat, in consequence of decomposing the phosphates and setting free phosphoric acid, in which the albumen is soluble. When, however, excess of nitric acid is added, its action predominates over that of the phosphoric acid, and the albumen is precipitated.

At the same time, it must be admitted that there are several facts connected with the behaviour of weak solutions of albumen with acid, and under the influence of heat, which are not satisfactorily explained; and forms of albumen having different reactions are from time to time met with. The whole subject requires further careful investigation.

Scherer describes a variety of albumen which is only imperfectly coagulated by heat. It is probable, however, that many of the peculiar reactions met with from time to time depend upon the presence of other substances dissolved with the albumen, rather than upon any peculiar properties of the albumen itself, or the existence of a variety of this substance.

Other Tests for Albumen. Albumen is precipitated from its solutions by alcohol, alum, and many metallic salts, as those of lead, mercury, copper, and silver. Bichloride of mercury is employed as a test, and ferrocyanide of potassium precipitates a solution of albumen to which acetic acid has been added. These salts will, however, produce precipitates in solutions of other substances allied to albumen.

On Estimating the Quantity of Albumen in Urine. The quantity of albumen varies much in different cases, sometimes amounting to a mere trace; while, in other instances, a proportion not much inferior to that present in serum has been met with. In order to estimate the quantity of albumen, it is only necessary to add acetic acid, and heat the urine in a

water-bath to a temperature of 194°, or until it boils. The precipitate is to be collected on a weighed filter, well washed, dried, and weighed. The albumen always contains a small quantity of earthy salts, which are obtained by incineration. The residue must be deducted from the weight of the dried precipitate.

Albuminous Urine, from a patient with acute inflammation of the kidney. The deposit contained numerous granular casts, but no fat-cells were present; specific gravity, 1015; acid. The albumen coagulated by heat and nitric acid.

Analysis 46.

		In 100 parts of solids.
Water	952·00	
Solid matter	48·00	100·00
Urea	13·052	27·19
Albumen, mucus, and uric acid	19·204	40·00
Extractives	12·864	26·80
Alkaline salts	2·784	5·80
Earthy salts	·096	·20

New Substance allied to Albumen. Dr. Bence Jones obtained a new substance allied to albumen from the urine of a patient (under the care of Dr. Watson and Dr. MacIntyre) suffering from mollities ossium. The urine was slightly acid; specific gravity, 1034.2 (*Phil. Trans.* for 1848, p. 55). The deposit consisted of phosphate of lime, oxalate of lime, and cylinders of fibrine. Phosphates were precipitated by heat; but the urine was cleared by adding a drop of acid. No precipitate was produced by nitric acid; but, after being heated and left to cool, it became solid. The solid material was redissolved by heat, and precipitated again when the mixture became cool. On some days, the urine coagulated by boiling; on others, prolonged boiling produced no change. A specimen, which did not coagulate by boiling, was carefully examined. It was acid; specific gravity, 1039.6. It contained much urate of ammonia, phosphate of lime, and oxalate of lime. The urine contained—

		In 100 parts of solids.
Water	890·72	
Solid matter	109·28	100·00
New substance	66·97	61·28
Urea	29·90	27·36
Uric acid	·96	·87
Earthy phosphate	1·20	1·18
Chloride of sodium	3·83	3·50
Sulphate of potash	2·10	1·92
Alkaline phosphate	4·45	4·07

The new substance was precipitated from the urine by alcohol, well washed, and ultimate analyses were made. It contained 1·09 per cent. of sulphur, and ·20 per cent. of phosphorus. This substance is the *hydrated deutoxide of albumen.* It was soluble in boiling water, and the precipitate produced by nitric acid was redissolved by heat, and it formed again as the mixture cooled. A similar substance occurs in small quantity in pus, and in the secretion from the vesiculæ seminales. The urine contained 66·97 parts per 1000 of this substance—an amount equal to the quantity of albumen in the blood. The patient was passing about thirty-five ounces of urine daily, which would contain upwards of 1000 grains, or more than two ounces of this new material.

Dr. Bence Jones recommends that this substance should be looked for again in acute cases of mollities ossium. He suggests that the reddening of the urine upon the addition of nitric acid might lead to its detection.

[*To be continued.*]

Society for Relief of Widows and Orphans of Medical Men in London and its Vicinity. The seventy-second annual dinner of this Society was held on Wednesday, the 11th instant, at the Albion Tavern; Thomas Arthur Stone, Esq., the President, in the chair. At the toast of "Prosperity to the Society", the President dwelt upon the very great amount of good done by this Society, and instanced an application which has been recently made to the Society, in which a widow and five children will probably receive £95 a year from its funds, the sum diminishing gradually as the children grow up to maturity. A sum of £1828 : 10 was expended last year amongst thirty-nine widows and twenty-two orphans. Donations were announced to the amount of £207. We desire to remind our readers that relief is granted to the widows and orphans only, and that the election is by ballot. Every medical man residing in London and its vicinity should become a member.

Lectures
ON
THE HISTORY OF MEDICINE.

DELIVERED AT
THE GROSVENOR PLACE SCHOOL OF MEDICINE.
BY
ALEXANDER HENRY, M.D.

Lecture II.

Origin of Medicine. Difficulties of its Investigation. General Characters of the Early Stages of Medicine. Medical System of the Ancient Egyptians. Grecian Legends. Apollo. The Cabiri. Orpheus. Incantations. Melampus. Chiron. Heroes of the Homeric Poems. Æsculapius: Examination of the Myth concerning him. Machaon and Podalirius. The Æsculapian Temples and Symbols. Practice of the Asclepiads. Summary.

[*Concluded from p.* 284.]

Æsculapius was honoured as the medicine god; but at what period his worship commenced, we have no certain data for shewing. It did not exist at the time of the Trojan war; for Homer, with all the evident desire that he has to speak with honour of the medical art, never calls him by any higher title than that of "the blameless physician" (ἀμυμων ἰητηρ). Hesiod also omits him from his *Theogony;* and Pindar, who lived much later, mentions Æsculapius in one of his odes, merely as a hero and the conqueror of many diseases. In course of time, however, we meet with the accounts of temples erected in various parts of Greece and Asia Minor to Æsculapius, as the genius of medicine. These temples were generally known under the name of *Asclepieia;* and were institutions to which the sick repaired for the cure of their diseases. They were, in fact, sacred hospitals, the priests of which were physicians, who, as I shall afterwards describe, veiled their practice in mystery from the eyes of the people. The priests were reputed to belong to the family of Æsculapius, and were hence termed *Asclepiadæ*, or sons of Asclepios.

The principal and most ancient of these Æsculapian temples were those of Titan in the Peloponnesus, Tricca in Thessaly (which you will remember as one of the possessions of Machaon and Podalirius), Tithorea in Phocis, Epidaurus, Cos, Megalopolis in Arcadia, Cyllene in Elis, and Pergamus in Asia Minor. Of these, the temple at Epidaurus was at first the most celebrated; and it was to this temple, legend says, the Romans applied for aid on the occasion of a plague which devastated their city. But the fame of all the other temples was eclipsed at last by that of Cos, from which emanated Hippocrates.

Some points of interest in relation to the Æsculapian temples must be noticed before we give a sketch of the practice which their priests followed.

Hygieia, the goddess of health, was reverenced as the sister of Æsculapius, and temples were erected in her honour also in various parts of Greece. This worship of Hygieia, however, it seems probable, was an institution of later date, and grew out of a recognition of the importance, in medical matters, of attending to matters relating to health. And, in regard to the temples of Æsculapius, it seems that hygiene was carefully attended to, superstition even being called into play to enforce obedience. Almost all the temples were regarded as sanctuaries, which could be approached by no profane person until he had undergone a repeated course of purification; and in one of them, at Egium in Achaia, the statue of Hygieia was allowed to be looked on by no one but the priests. It was forbidden to allow females to be delivered, or the sick to die, in the neighbourhood of the temple of Epidaurus. At Tithorea in Phocis, the temple was surrounded, at a considerable distance, by a hedge, within which no building was allowed to be erected; and a previous purification in an adjoining temple of Isis was necessary to all before they could even enter this sacred enclosure.

Especial care was taken with regard to the situations of these temples; and I think the moderns, in building

hospitals, might often with advantage call to their mind what the ancients did when they erected analogous institutions. The Æsculapian temples were never built within towns, but always outside; and, whenever practicable, an elevated situation was selected, surrounded, if possible, by trees, with the view of intercepting noxious winds. The water-supply was also carefully attended to; and hence we meet with temples erected in the neighbourhood of streams or springs, sometimes mineral or thermal.

The temple of Cyllene in Elis was situated on a cape, in the most fertile part of the Peloponnesus. That of Epidaurus, also near the sea, was surrounded by wooded hills. The temple of Las in Laconia was placed on Mount Ilium, near the Gulf of Laconia; and in its vicinity flowed the pure stream of the Surinus. The temple of Cos was in a suburb of the town. At Athens, it is believed that there was a warm spring within the precincts of the temple; and at Cenchrea in Corinth, a saline spring bathed the walls of the temple of the medicine-god.

The symbolical statues of Æsculapius varied somewhat in the different temples; but the figure of a serpent generally formed part of the representation. At Epidaurus, he was represented as sitting on a throne, holding a staff in one hand, and seizing a serpent by the head with the other; while a dog lay stretched at his feet. At Corinth, Megalopolis, and Ladon, he was represented as a child, holding a sceptre in one hand and a fir-cone in the other. But in general he was represented as a long bearded old man. On some ancient monuments, he is depicted as laying one hand on his beard, and holding in the other a knotted staff with a serpent twined round it. He is often depicted with a crown of laurel, and with a cock and ram at his feet. Other accessories are also mentioned; but, among all of them, the serpent plays the principal part. The god was even believed to appear under the form of this animal; as was fabled to have occurred on the occasion when the Romans applied to the temple at Epidaurus for relief from a plague. It is related, that a sacred serpent then of its own accord left the temple, and went on board the Roman ship; that, the ship touching during the voyage home at Antium, and being delayed there by contrary winds, the serpent went on shore and visited a temple of Æsculapius in the neighbourhood; and that, the sacred animal having again voluntarily come on board, the ship reached the Tiber, when the serpent landed on an isle near Rome, where a temple was forthwith erected.

What was the meaning of the serpent which is represented in company with Æsculapius? Some of the ancient writers believed that it was the symbol of regained health, on account of its changing its skin; others supposed it to be an emblem of the prudence and vigilance which physicians should exercise. But it is probable that the serpent points to the eastern origin of the worship of Æsculapius; for, indeed, the Phenicians and Egyptians regarded the serpent as divine. The Phenicians, it is said, depicted it with the head of a vulture, the symbol of an intelligent soul; and in connection with this, I must mention that Æsculapius is sometimes represented with a vulture (or an owl) at his feet.

The staff which Æsculapius bears in his hand has been regarded as a symbol of the difficulties which surround the medical art. But, leaving the notice of these symbols, the interpretation of which is obscure, except so far as they may give indications of the origin of the worship of Æsculapius, I will proceed to a more interesting subject—the practice followed in the temples of the Asclepiads. The period of which I am about to trace the medical history is stated to be about seven hundred years, extending from the date of Podalirius and Machaon, and their immediate successors, down to the time of Hippocrates, in the fifth century before the Christian era.

Medicine, during this period, is described as having been entirely in the hands of the Asclepiads; who, like the Egyptian priests, guarded their knowledge with a jealous care, and transmitted it only to their descendants or to the initiated. The people were taught to regard disease as the effect of divine anger, and were obliged to obtain the aid of the medicine god by appropriate rites. These rites varied at different periods; but their general object seems to have been to act on the imagination, and to ensure a strict regimen. Before entering the temples, a course of purification was required; which would no doubt both have a salutary effect on the body, and would give the patients hope and confidence that benefit was about to be derived from the god. The healthy and cheerful situations of the temples would also, it may be supposed, have a beneficial influence.

When the patients were admitted, rigorous abstinence was enjoined; and, if we may credit the records of the ancients, fasting must have often been carried beyond the bounds of prudence. The effect of this would be both to weaken the body, and to render the mental powers more subservient to the will of the priests, who also influenced the minds of the sick by a recital of the miracles said to have been wrought by the god in the precincts of the temple; that is to say, by reciting the history of cases cured, dwelling especially on those which bore an analogy to that of the patient before them. After this recital, which was given during a promenade in the temple, sacrifices were made to the medicine god; generally a ram, but often also a cock. At Cyrene goats were offered; at Tithorea, all animals except goats. The sacrifices were accompanied by prayers for revelation from the god. Pliny says, that the priest chanted a hymn, which was to be repeated by the person who made the offering, the chanting being accompanied by instruments. Bathing was required, before the patients were admitted to hear the divine oracle; and with this was conjoined anointing with oil, frictions, and other manipulations, which doubtless had, in many instances, an invigorating effect. Almost always, too, the patients were submitted to a course of fumigation before receiving the oracular responses. All preparations having been made, they slept in the vicinity of the temple, on the skin of the ram which they had offered, or in a bed, and waited the appearance of the medicine-god in a dream. Æsculapius was said to appear and to point out the treatment. Very probably, the treatment which the patients had undergone, and the impressions made on their minds by the recitals of the priests, would produce dreams, in which Æsculapius, and the instances similar to their own, would often be prominent features—and in the course of which the use of certain medicines would be indicated. The dreams were interpreted by the priests, or by the guardians of the temple. These latter had the duty also of dreaming for the patients, or of pretending to do so, in cases where sufficient faith was not said to be exhibited—or, more probably, when the priests chose to believe that nothing could be made out of the patient's dreams.

The treatment followed was generally of a very simple kind; such as mild purgatives, easily digestible food, or fasting, baths, etc. Sometimes the treatment was severe, and such as no man in his senses would submit to. Aristides, who has left an account of his treatment in the temple of Pergamus, relates that he was so weakened by emetics as to become dropsical, and that repeated bleedings were enjoined to him—on one occasion, amounting to one hundred and twenty pounds! He, however, escaped this absurd injunction by interpreting it to mean that he was not to lose too little blood. Such is the absurdity to which superstition will sometimes lead men. Like the priests of Egypt, the Asclepiads gave allegorical names to the medicaments which they employed.

When the patient died, the death was attributed to a failure in his faith in the power of the god, or to want of obedience to his precepts.

When the patients were cured, they returned thanks to the god, and made presents to the priests. Sometimes the patients presented a model of the part affected in ivory, gold, silver, or some other metal. This practice reminds one of the "golden emerods" which the Philistines, as related in the Bible, had to dedicate in order that they might be delivered from the plague of hæmorrhoids with which they were affected.

But a more important custom was that of inscribing the names of the patients, the description of their diseases, and the remedies which had relieved them, on tablets or columns of metal. In the time of Pausanias, the temple of Epidaurus contained six columns, bearing inscriptions of this kind in the Doric dialect. No doubt this practice conduced to the advance of medicine; especially where, as in the temples of Cos and Cnidus, the art was followed with a view to its improvement. It is probable, as I shall afterwards have occasion to show, that Hippocrates derived much from the tablets in the temple at Cos.

A custom which tended to retain medical knowledge in the hands of the Asclepiad priests was that of inscribing any new discovery in medicinal remedies on the gates and columns of the temples; and of placing newly-invented instruments of surgery in these institutions.

Such was, we are told, the general state of medicine in the temples of the Asclepiads. Our next task would be, to notice especially certain of those temples in which medicine appears

to have been cultivated with special care and success, and from which emanated the solid foundation of that art of which we are followers. But the consideration of this, and of the circumstances which led thereto, must be deferred to another lecture. I will therefore sum up the principal conclusions which seem to me derivable from the notices of medicines among the Greeks with which we meet in mythology and in the accounts that have been handed down to us regarding the customs of the priests.

1. The medical traditions of ancient Greece seem referrible to two sources—one extrinsic, the other indigenous.

2. The system derived from an extrinsic source was of a similar character to that which prevailed in Egypt. The priests were the reputed possessors of professional knowledge; they acted also as the mediators through whom the gods were imagined to be appeased when offended, and to communicate the means requisite for the cure of disease. This hieratic medicine was doubtless of eastern origin; and tradition points to it as having been introduced from Asia by the Cabiri or Curetes.

3. But the practice of the healing art seems not to have been entirely confined to the sacred order. A certain amount of medical knowledge of a very simple kind, such as would spring from the necessities of mankind, and remain, at least for a time, independent of superstition, is related to have been cultivated by the heroes of Grecian tale. The origin of this is attributed to the Thessalian Chiron. It appears to have consisted in a rude military surgery, the treatment of wounds received in battle.

4. Medicine appears, at an early period, to have been specially cultivated by certain persons or families, who thereby acquired for themselves the fame of being the fathers of the art, and were embodied and worshipped under the common title of Asclepios or Æsculapius.

5. The Asclepios of Homer and the older writers is not, strictly speaking, the Æsculapius who was subsequently deified and worshipped; for the attributes of the Homeric Æsculapius are comparatively limited. He was a Thessalian chieftain, the disciple of Chiron; and, notwithstanding that he had the reputation of being *par excellence* a physician, the practice of his sons in the Trojan war was purely Chironian or surgical; for, at the very outset, there is no intimation of consulting their aid in the plague, with the account of which the first book of the Iliad opens.

6. Æsculapius, as worshipped, was the embodiment of medical knowledge; and the similarity in many respects, between the practices of the Æsculapian and those of the Egyptian priests, point to the fact, either that the Grecian medical priesthood was of Egyptian origin, or that both the Egyptian and the Grecian systems of hieratic medicine were derived from a common Asiatic origin.

7. The practice of the Asclepiad priests consisted in a close attention to the general precepts of hygiene, especially with regard to the situation of the temples; in the employment of means to work on the minds of their patients; and in the administration of medicines, in some cases of a most simple kind, but in others probably more active.

8. Medicine may be supposed to have advanced with unequal steps in the Æsculapian temples. In some, more slowly; while in others, the art was followed with zeal, and reached perhaps as high a state of development as could be expected, considering the difficulties which impeded its progress. For, to mention no others, and setting aside the impediment offered by the priest system, the want of a knowledge of anatomy, and consequently of physiology, must have greatly retarded progress. For, as you are aware, the religious feeling of the Greeks in regard to the sanctity of the dead was so great as must have precluded the use of their bodies for the purposes of dissection, or even of making *post mortem* examinations. However, the Asclepiads very possibly derived some notions of the bones and ligaments from treating dislocations, fractures, and other injuries.

Having thus briefly sketched the state of medical practice in the Æsculapian temples, I shall turn aside for a while from these institutions, in order to take notice of certain agencies which, though lying outside the medical world of the Asclepiads, exerted a remarkable influence on the practice and progress of the healing art. In our next lecture, then, I propose to bring before your notice some of the doctrines of the early Grecian philosophers, and to allude generally to the causes which led to the breaking down of the barriers within which medicine was enclosed by the hieratic system.

Transactions of Branches.

SOUTH-EASTERN BRANCH: ROCHESTER, MAIDSTONE, GRAVESEND, AND DARTFORD DISTRICT MEETINGS.

CASE OF CONGENITAL MALFORMATION OF THE COLUMNÆ CARNEÆ OF THE TRICUSPID VALVE.

By J. J. D. Burns, M.D., Convict Prison, Chatham.

[*Read at Gravesend, March 30th, 1860.*]

A male patient, aged 21, on the 10th February, at 7 A.M., complained of pain across the stomach, appeared faint, and was unable to stand alone. He was quite sensible. The pulse was scarcely perceptible; the extremities were cold. He was placed in a warm bath, and removed to bed; and an ounce of julep of ammonia was ordered to be given every hour.

9 A.M. Reaction appeared to be setting in. The eyes were congested; the face was flushed. There had been neither vomiting nor purging; but he had severe cramps across the stomach. The bowels had not been opened for two days. There was dulness on percussion over the left side of the chest, with puerile respiration, and pain on taking a full inspiration. He was ordered a powder of calomel and antimony, with a mustard poultice to the side.

11 A.M. He vomited nearly two pints of dark bilious matter, with the medicine that had just been administered. The skin was hot and dry.

2 P.M. He seemed relieved by the vomiting. The skin was less dry. He complained chiefly of tightness and pain across the chest. He was ordered to have ten grains of calomel.

4·30 P.M. The bowels were freely opened. The pain in the chest was severe; the skin was hot and dry. No pulse was perceptible except at the cardiac region, and there but slightly. Twelve leeches were applied to the side; a grain and a half of opium was administered; and hot bottles were applied to the extremities.

Feb. 11, 2 A.M. He had been very low, but had rallied a little. He had some dyspnœa, but it was not complained of. The feet were cool. The pain was all referred to the left side. He had blueness of the lips; the pulse was not perceptible at either wrist, or at the temples. The bowels had been freely opened. He was very weak, and could not bend his knees. He complained of great thirst.

7 A.M. The breathing was difficult; the surface of the body was quite cold; no pulse was perceptible. A blister was applied over the chest.

He died at 9 A.M. The nurse informed me that he was quite sensible to within a short period of his death; and he did not remark till then any appearance of immediate dissolution.

Post-mortem Examination, made Feb. 12th, at 10 A.M. The surface was congested, particularly the chest and upper extremities, as well as the depending parts. There were carnisation and active pneumonia in the lower lobe of the left lung, involving its whole extent; the remainder was healthy. On opening the pericardium, there was the usual quantity of serum. The heart was quite free, and of natural colour except at the upper part of the right auricle, where it was studded with black spots, as if the blood had exuded through the minute vessels. The left side of the heart was filled with dark coloured blood. A deposit of fibrine, in layers similar to that in an aneurismal tumour, was found firmly adherent to the inner walls of both auricles. The columnæ carneæ of the right ventricle were adherent, apparently from congenital malformation obstructing the play of the tricuspid valve. Excepting slight general congestion, every other part examined was of normal appearance.

Remarks. My first impression in this case was, that the symptoms indicated faintness and debility from obstructed bowels and biliary derangement; the pain in the left side arising from catarrh consequent on some previous pulmonary affection. As the case advanced, my opinion was partly confirmed; but the chest symptoms becoming more prominent, my attention was directed to them, when, by stethoscopic examination, I found there were unmistakable signs of active pulmonary inflammation. Yet, to account for the pulse was somewhat puzzling. Neither systole nor diastole could be distinguished; a slight fluttering was all that could ever be de-

tected about the cardiac region, and such as might be imagined to arise from general want of muscular power in the heart, or from engorgement. I then ordered him to be bled; but this being opposed to the opinion of the gentleman under whose care he was left, and as he had vomited freely a large quantity of bilious matter, I directed twelve leeches to be applied to the side, and a large dose of calomel to be given, which had the effect of freely opening the bowels. The blueness of the lips was then remarked; but there was no pulsation or signs of engorgement of the vessels on the right side of the neck, or the cyanosis that would be expected to attend on organic disease of the right side of the heart. There were no sounds discoverable to guide the practitioner; the patient was quite sensible; and the disease of the lung on that side fully accounted for the pain felt in that situation.

When the body became warm, a blister was applied, and an opiate given to alleviate the pain, which he in no instance referred to the heart. From the *post mortem* examination, it would appear that endocarditis had existed at a former period, caused probably by obstruction to the circulation, from the limited action of the tricuspid valve, producing the fibrinous depositions that were discovered on the inner surface of both auricles, with regurgitations; and that, on his last illness, the power of the heart became paralysed, from its incapacity to suit itself to the general constitutional disturbance, arising from the extensive pneumonic inflammation near it, and the shock the nervous system had suffered from a sudden chill during profuse perspiration.

I am not aware of any other instance on record where such a malformation has been mentioned. There was no emaciation to indicate an inadequate supply of blood to the system, and the perfectly healthy appearance of the columnæ carneæ forbade any idea that their union had arisen in the course of previous inflammation.

In the year 1850, Dr. Ritchie, of Edinburgh, published some papers on disease of the heart, and he there states, that in patients free from any acute disease connected with cardiac lesion, the subjects of disease of the right side of the heart will appear in good health, or only a little more florid than usual; while those having disease of the left side will appear delicate, with pallid face, and more or less distension of the capillary veins. The former takes a deep breath without inconvenience; the latter cannot inspire deeply, and the effort makes him cough; the former has a good digestion—the pulse impulsive and strong; the latter has the digestion impaired, and the pulse feeble and low.

Neither of these distinctions would have assisted the diagnosis in this instance, unless it was the healthy appearance of the patient. I had never seen him before, and he made no complaint referrible to heart-disease, which was only discovered on examining the pulse.

It appeared, on inquiry, that he contracted the disease by lying on the stone floor while in a state of perspiration. His previous health was good.

THE DIAGNOSIS OF PHTHISIS BY THE MICROSCOPE.

By Frederick James Brown, M.D., Rochester.

[*Read at Gravesend, March 30th*, 1860.]

I am desirous of laying before you some specimens of pulmonary tubercle prepared by Dr. Andrew Clark, of London. They show the presence of the elastic trabeculæ of the air-vesicles, and furnish evidence of the destruction of the lung-tissue.

A few years ago, the pulmonary trabeculæ were discovered in the sputa in phthisis by Schrœder van der Kolk and by Dr. Andrew Clark, independently of one another. The former considers, or did consider, the examination of the sputa valuable only early in phthisis, whilst Andrew Clark holds that the examination is useful at all periods, as being the only *certain* means of detecting the disintegration of the lung and the increase of the disease. It is a fact that the disease often increases whilst the patient is getting fat and appears sufficiently well to deceive himself, his friends, and his medical attendant.

The views of Dr. Andrew Clark, briefly expressed, are as follows:—

1. The parietes of the air-vesicles are indivisible; that is, they cannot be separated into layers. They are made up of membrane with blood-vessels, and yellow elastic tissue arranged as trabeculæ.

2. The air-vesicles are lined by scaly epithelium. The epithelium is easily demonstrated in the child: it is more difficult of demonstration in advanced life. It plays an important part in all chronic structural lesions of the lungs. It is absent in emphysema. The existence of an epithelium of the air-vesicles is denied by Bowman, Rainey, and Beale. They admit the appearance of cell-particles in the air-vesicles, but they believe them to be only the nuclei of the capillaries. They admit, also, the presence of nucleated cells that cannot be ascribed to the capillaries, but they believe them to be the product of morbid action. Dr. Clark's reply is, that no lung is found without them.

3. Previously to the tuberculosis there is a disorder of the assimilation, which may be termed pretubercular cachexia.

4. Phthisis commences with the deposit of tubercle, and is a term common to all the stages of pulmonary tuberculisation. Phthisis is the name assigned to a certain anatomical lesion of the lung, and is to be understood in a different sense to that in which the older physicians regard it; for with them phthisis is hectic fever arising from pulmonary tuberculisation. Phthisis, in the language of most practitioners, consists of hectic fever due to softened tubercle in the process of elimination. This is symptomatic phthisis. Anatomical phthisis, so to speak, consists in the lesion of the lung, whether attended or not by hectic fever. The distinction resembles that made betwixt the pneumonia before Laennec's time and that pulmonary lesion recognised as pneumonia subsequently to the introduction of auscultation into practice.

5. Elimination of softened tubercle is the third stage of phthisis, and may go on in one part whilst deposition occurs in another; consequently, there is a mingling of the stages of phthisis—regarding this disease in an anatomical light.

6. Tubercle is a retrograde metamorphosis of the structural elements and of the fluid secretions (if there be any) of the part in which it may be found. Tubercle is not a deposit from the blood, but is a product of vitiated nutrition—not a simple exudation, but a complex result of perverted vital action. When tubercular matter accumulates and presses upon the blood-vessels, it may excite irritation, in which case congestion is not unfrequently set up, which terminates in an exudation, which becomes mixed with the tubercular matter, and afterwards tuberculises. Such exudation in the first place is just like the exudation that takes place on an inflamed pleura; but the exudation being placed under unfavourable circumstances, does not become developed into a tissue, but degenerates into tubercle.

7. The air-vesicles are the seat of tubercle in the lung.

8. When the tubercular matter accumulates to such an extent as to compress the walls of the air-vesicles, the entire structure of the walls disintegrates, except the elastic trabeculæ (which are alone *characteristic* of the air-vesicles).

9. The elastic trabeculæ are seen in the sputa, lying in disorder amongst the disintegrated elements of the tissue, and are readily detected by the aid of the microscope.

10. The elastic trabeculæ are present in the sputa during the elimination of the tubercle, and constitute the diagnostic mark of the eliminative stage.

11. If elimination takes place with only minute deposit in the lung, the microscope will reveal the disease sooner than the pleximeter and stethoscope; but where there is a considerable mass of tubercle in the lung, without elimination of any portion, percussion and auscultation, taken in connection with the general symptoms, will detect the disease, whilst the microscope gives negative results. Again, minute deposit in a quiescent state will be overlooked, although both the ear and the eye be employed for its detection.

12. The physician can confidently declare that phthisis exists when he finds the elastic trabeculæ in the sputa.

13. Phthisis commences with the deposit of tubercle, and tends to one of two issues:—(*a*) to recovery by absorption, by calcification, or by induration and pigmentary transformation; (*b*) or to suppuration and the establishment of hectic fever.

14. It is yet uncertain whether recovery or progressive disease be the more frequent.

15. The air-vesicles may remain filled with tubercle in a state of complete quiescence, without softening or elimination, for years. This is a state of things that the microscope will not determine. It must be worked out by the study of symptoms and of auscultatory signs.

16. The parietes of the air-vesicles remain intact in phthisis until one or other of the following events happen. (*a*) The tubercular matter accumulates to such an extent as to compress the walls of the air-vesicles with such force as to empty or obliterate the capillaries, when, nutrition being suspended,

disintegration ensues, and the tubercular matter in one vesicle comes in contact with that in the adjoining vesicle, and so the two masses cohere. (*b*) The tubercular matter softens from any cause. (*c*) The tubercular matter sets up pneumonia, which breaks down the whole mass.

17. The elastic trabeculæ of the air-vesicles cannot be confounded with any other yellow elastic tissues *likely to be found in the sputa*, because of their character and arrangement.

18. Tubercle is often found in the tonsils; and the elongated cells of the tonsil-tissue, arranged as they are in an areolar form, might mislead an inexperienced observer. A little attention will obviate this apparent difficulty. The quasi-bands seen in sections of the tonsils consist of separate pieces, easily recognised as being separate, whereas the pulmonary trabeculæ are continuous and wavy. However, the distinction is made certain by chemical tests. The pulmonary trabeculæ resist the action of both acetic acid and liquor potassæ (inasmuch as they consist of yellow elastic tissue), whereas the elongated tonsil-cells resist acetic acid only, and yield to liquor potassæ, which renders them invisible.

19. The microscopic examination of the sputa enables us to detect softening tubercle in the process of elimination, which could not otherwise be detected; it confirms or corrects the diagnosis between phthisis, dilated bronchi, chronic bronchitis, etc.; and it determines the actual progress of the lesion of the lung.

Thus it is seen that the microscope confirms the opinion of the vulgar as respects "the spitting up of the lights", which is now an undoubted fact.

In conclusion, allow me to state my conviction that the detection of the yellow elastic tissue of the air-vesicles in the sputa is *one of the great discoveries* rendered to pathology by the microscope. The importance of being aware of the true state of matters in any given case, cannot be overrated; and I am sure that you will allow that when once we can pronounce a man to be under phthisis (using the term in the anatomical sense), we are likely to use hygienic and therapeutic means with greater precision and with greater prospect of success than if we considered the case to be one of catarrh, simple dyspepsia, or that *monstrum horrendum* "debility".

Reviews and Notices.

On Rheumatism, Rheumatic Gout, and Sciatica; their Pathology, Symptoms, and Treatment. By Henry William Fuller, M.D. Cantab., Fellow of the Royal College of Physicians, London; Physician to St. George's Hospital, etc. Third Edition; pp. 489. London: Churchill. 1860.

While, in comparing the three editions of Dr. Fuller's excellent book, there is perhaps less new matter in the third than in the second edition, the work bears the marks of having undergone a careful revision. The paucity of changes, then, leads to the inference that the author has seen no reason to depart from the views entertained by him four years ago. The work has gained too high a reputation to require elaborate praise; all that we will say is, that the present edition deserves all the good opinions which have been expressed of its predecessors.

Our readers will perhaps wish to hear Dr. Fuller's experience on one or two modes of treatment which have attracted attention in recent years. Speaking of the endermic application of narcotics in sciatica and other forms of neuralgic rheumatism, the author says:—

"At St. George's Hospital this method of treatment has been had recourse to in a considerable number of cases, and with tolerably satisfactory results. If the disease has not been cured through its agency, the pain at least has been relieved, and temporary repose obtained. In every instance, as far as I am aware, morphia has been the drug made use of; and usually its full effect has been produced, and sleep has resulted, within ten minutes from the first commencement of the injection. Nay more, on several occasions, the repetition of the operation on three or four successive days has been followed by complete and permanent cessation of pain. In many instances, however, this has not been the case; and my impression is, that although the palliative effects of this treatment may be produced in all cases of sciatica, yet that sedative injections do not exercise a curative effect, except in cases where the pain is of a purely neuralgic character, unconnected with local organic lesion, or with irritation in distant parts of the body. In short, their curative effects are manifest in the same class of cases as are benefited by morphia, applied to a blistered surface. The great advantage which the injection of morphia possesses over the application of the drug to a surface denuded of cuticle is the painlessness of its application, and the speediness of its action: the disadvantage is the power and consequent danger of the remedy when thus administered. The full dose is absorbed, and produces its narcotic effect at once; whereas, when taken into the stomach, it is mixed with the various ingesta, finds its way into the veins by slow degrees, and, probably, is in part decomposed in the stomach, and in part carried out of the system by the bowels, without having entered the circulation. Be this as it may, the effects of its injection are so powerful and so speedily produced, that I would earnestly counsel those who have recourse to its assistance, not to inject above a quarter or half a grain in the first instance, and to allow at least six hours to elapse before the operation is repeated. I have never known, nor have I ever heard, of mischief being produced by the remedy when thus cautiously employed, and I have seen it produce effects as satisfactory as they were astounding. The agonised sufferer, who for many days and nights in succession has been unable to close his eyes, or obtain a moment of repose, notwithstanding the internal administration of morphia in large doses, has fallen into a calm sleep within a few minutes after the injection has been commenced.

"Dr. Alexander Wood, of Edinburgh, recommends (British Medical Journal, Aug. 28, 1858) that an examination be made to ascertain the spot at which the pain is felt most acutely, and that the sedative be always injected at the painful spot. But our experience at St. George's Hospital is opposed to this plan of proceeding, inasmuch as it appears that the frequent introduction of a perforated needle, and the injection of fluid at the same spot, is apt to lead to inflammation and the formation of abscess—a result which may be avoided, if the needle is introduced on each occasion into a different part of the affected limb. Moreover, there is not any practical reason why the injection should be performed at the most painful spot; for our late house-surgeon, Mr. Hunter, who in the wards of St. George's Hospital, was one of the first in London to carry out the principle of Dr. Wood's practice, ascertained distinctly that it matters not in the slightest degree at what part of the body the injection is effected. The only requisites for obtaining safe and satisfactory results are:—1st, that a proper instrument be employed; 2ndly, that a concentrated solution of morphia be used, so that the cellular tissue be not unduly disturbed by the injection of a large quantity of fluid;* 3rdly, that the dose be sufficiently large to give relief from suffering, but not large enough to produce toxical effects; and 4thly, that the injection be not repeated at the same spot. With these precautions, the remedy is one which may be resorted to advantageously, whenever the pain of sciatica is very acute and persistent, and resists the action of drugs as ordinarily employed." (Pp. 459-462.)

Transactions of the Medical and Physical Society of Bombay. No. V. New Series. For the year 1859. Pp. 266; with an Appendix of 59 pp.; and the Abstract Proceedings of the Meetings of the Medical and Physical Society for the year 1859. Bombay: 1860.

The members of the Medical and Physical Society of Bombay are gradually accumulating, in their annual volumes of *Transactions*, a mass of information which must ultimately raise our medical knowledge of that part of Her Majesty's dominions to a very perfect state. Not only does this information consist of mere "practical" details, but it contains the result of observations made on the physical conditions of various districts; on the relative liability of different races to various diseases; on every subject, in fact, which can have a hygienic or a medical bearing. The volume before us is a very good example of its class. It consists of:—Annual Reports of the 10th and 25th Regiments Native Infantry, of the 1st Bombay

* "The solution usually employed at St. George's contains ten grains of the acetate of morphia to one drachm of distilled water; but I prefer a solution of five grains to the drachm, inasmuch as the salt is more readily soluble in this proportion, while the quantity of the liquid which it is requisite to inject is not large enough to excite local irritation."

European Regiment, of the European General Hospital, of the Sick of the Engineer Department at Aden, and of the Sanitarium at Mount Aboo, furnished by various Surgeons and Assistant-Surgeons in the service; Remarks on the Prevalent Diseases of Upper Sind among European Troops, by Assistant-Surgeon A. K. Simpson, M.D.; Geological Report, and Meteorological Register, of a part of Beloochistan, by Assistant-Surgeon H. Cook, M.D.; an Account of the Calculi in the Museum of the Grant Medical College, with some General Remarks on Calculi in India, by H. V. Carter, M.D.; Selections from cases treated in the Jamsetjee Jejeebhoy Hospital, by J. Peet, M.D.; Cases of Diseased Foot, by Sub-Assistant-Surgeon Bazonjee Rustomjee; Analysis of the Mineral Springs and various Well and River Waters in the Bombay Presidency, by H. Giraud, M.D., and R. Haines, M.B.; and a Table of Cases of Lithotomy performed in the Civil Hospital, Hyderabad, in the year 1859, by Assistant-Surgeon Stedman. The Appendix contains some articles of a similar nature to the preceding, but chiefly consists of the histories of isolated cases of interest.

British Medical Journal.

SATURDAY, APRIL 21st, 1860.

THE COLLEGE OF PHYSICIANS AND THE GENERAL PRACTITIONERS.

At a meeting of the Fellows of the College of Physicians, on Wednesday last, a decision was come to, which we believe will exercise a very important influence upon the general practitioners—in other words, the great body of the medical men of the country. In our last number, we stated that the question of admitting this important body into the College under the name of Licentiates, was under consideration; by the vote of the Fellows, the question has been decided in the affirmative, and ere long the portals at Pall Mall will be thrown wide open to the general practitioners of the country. During the discussion some very interesting facts were brought to light, and the archives of the College had evidently been ransacked in order to give some claim for this quiet proposition to annex, if possible, this large domain of medicine. Thus it was stated that of old the College did give a licence to its members to dispense their own medicines, and a curious instance in point was read—hence it might be considered that the College resumes its old rights, rather than usurps those of others.

With regard to the dispensing of medicines by practitioners connected with the College of Physicians, we have before us some information in an article published in the *London Journal of Medicine* for June 1850. The writer argues strongly that the preparing and dispensing of their own drugs was formerly an ordinary practice among physicians. He expresses a feeling of shame at having been told, on high authority, "that a mark of degradation is affixed to this or that medical practitioner, not because his education is inferior, not because his moral character is suspicious, not because his intellect is more feeble, not because his physical efforts are less strenuous, but *because he dispenses his own medicines!*" He then goes on to quote passages from some old works of the seventeenth century, written by Fellows of the College of Physicians of London, which advocate the propriety and necessity of physicians dispensing their own medicines. These essays were probably written at a time when the fact of members of the College of Physicians dispensing their own drugs had not become a forgotten thing, and when it was perhaps hoped that the old custom might be revived.

For instance, here is what was said in 1670 by Dr. Jonathan Goddard, Fellow of the Royal College of Physicians and of the Royal Society:—

"It will not be hard for a physician, making use only of a servant or servants, to oversee and with his own hands prepare and compound what is necessary for him to do; and by this means, though he be in full practice, at the expense of a few spare hours, to store himself sufficiently for all his occasions. . . . Nor can it be any dishonour to a physician thus to employ himself between whiles, in the making of such choice and important medicines."

Again, Dr. E. Maynwaring, in his *Praxis Medicorum Antiqua et Nova*, published in 1671, urges that the physician who is unable to prepare and dispense medicines

"Cannot be able to direct, correct, and improve medicines; that, without such knowledge, he is very unfit to undertake the management of the sick; very unskilful to adapt, order, and appoint medicines; very unable to perform a cure; that his titles and abilities are very incongruous."

These quotations shew the opinions entertained by some of the members of the profession who lived above a century and a half ago. They do not absolutely prove to our mind the necessity that every physician should dispense his own drugs; but they do most clearly point out that the dispensing of medicines by persons in connexion with the College of Physicians is not derogatory to that respectable corporation, and that it was not held to be so in times past.

Again, by the still unrepealed act of Henry VIII, the College has the right of examining in surgery. Here is the clause in point:—

"And forasmuch as the science of physic doth comprehend and contain the knowledge of surgery as a special member and part of the same; therefore be it enacted, that any of the same company or fellowship of physicians, being able, chosen, and admitted by the said president and fellowship of physicians, may, from time to time, as well within the city of London as elsewhere within this realm, practise and exercise the science of physic in all and every his members and parts, any act, statute, or provision made to the contrary notwithstanding."

The College of Physicians, then, has the power of monopolising the whole examination of the future general practitioners! Of course, such a step would never for a moment be contemplated; but it is a singular instance of the powers that lie dormant in old corporations, and the danger of defying them with a too high hand.

Returning to the article to which we have referred, we notice that the writer, in anticipation, set forth views much in accordance with those which have been recently maintained as to the advisability of a combined action of the two Colleges for the qualification of the general practitioner:

"We think," he says, "that the whole profession might be received within the portals of the two colleges, namely, that of the physicians and that of the surgeons; and that the rank and sphere of practice of each member of the medical community might be left to his individual tastes and talents. The sanction, or call, of the profession, should be the chief qualification for the rank of a consultant. Superior skill, when associated with honourable conduct, commands success more certainly than artificial class-distinctions; and, in this enlightened age, the public and the profession respect collegiate status, only when associated with individual worth..... It is highly advantageous that consulting physicians and surgeons should exist, who, from the superiority of their intellect and

the extent or speciality of their studies, may be called in, to advise and assist their professional brethren; but it is also far more necessary, that the vast mass of the medical community be so educated, as to be enabled, in situations where no assistance can be obtained (as at sea, in the colonies, and in the provincial towns and villages of England), to minister, and to minister efficiently, to all the diseases incident to humanity."

The College of Surgeons having, with their accustomed blindness, refused to come to any terms with the College of Physicians with respect to the establishment of a joint examining board, for the licensing of future general practitioners, thereby, as far as we can see, throw the game entirely into the hands of the College of Physicians. There can be little doubt, we think, that the general practitioners of the country will eagerly avail themselves of the invitation held out to them, and will flock to join the standard about to be erected in Pall Mall. Hitherto the general practitioners, although forming numerically the strongest body of medical men in the country, have been nothing better than a rope of sand; their voice has carried no weight in the councils of the College of Surgeons. They have been defied, insulted, and outraged by the manner in which that select vestry has allowed unqualified persons to become licentiates; and until yesterday they seemed powerless to help themselves. The protests they have hurled by hundreds against the governing clique have been deposited in its waste paper basket, and there really seemed nothing more to be done. But, if we mistake not, the resolution adopted by the College of Physicians will change all this. If the general practitioners rally in a body to the College of Physicians, they will immediately have a powerful corporation to make common cause with them, and powerful and astute leaders to direct them. And, it must be remembered, the ties between the general practitioners and the fellows of the College of Physicians are exceedingly intimate; all the younger practitioners have received the better part of their education at their hands —have gone the rounds at the hospitals with them—have listened to them day after day in the lecture theatre. Recollections of daily intercourse of this kind will prove a powerful lever in the hands of the College of Physicians; and, without doubt, they will use it with effect against the irresponsible body in Lincoln's Inn Fields, which has so deliberately falsified its own license, and thereby disgusted its respectable members. "It's rare to see the engineer hoist with his own petard"; and most certainly it would be only poetical justice if the College of Physicians, by its judicious tactics, should be enabled to turn the forces of the College of Surgeons against its own unnatural leaders.

The curriculum of the College of Physicians will be of course high—an intimate knowledge of physiology will without doubt be enforced: and, good as the examination has for some time been at the Apothecaries' Hall, we may fairly expect a much better one at Pall Mall. We hear it argued in some quarters, that possibly the College of Physicians may fix so high a standard, that the future practitioners may prove above their work: but this objection is idle. High qualifications never yet have marred a man's usefulness; indeed, the fuller a man's knowledge, the more he feels that his work, especially in such a science as medicine, is above him. It seems to us, that this resolution of the College of Physicians is the most important fruit yet yielded by the Medical Act; and we believe the great body of the profession will agree with us, in thinking that the most conservative body among us has inaugurated the new era in medicine by the introduction of a very bold and liberal measure.

THE WEEK.

We desire most earnestly to call the attention of our associates to the appeal on behalf of the Medical Benevolent Fund, which appears to-day in our advertising columns, and to urge them to make a generous response. So good a cause can scarcely need any elaborate pleading in its support; the simple appeal in behalf of our less fortunate brethren and their families should be in itself sufficient to relax the purse-strings of any member of a profession the essential character of which is benevolence. We will merely, therefore, repeat here the final sentence of the appeal, endorsing every word of it, and entreating all who read it to allow it to have its full weight, and to lead them to do that for others which they would, if themselves in misfortune, desire that others should do for them.

"The Committee of the Medical Benevolent Fund venture to think that a more worthy cause can scarcely be conceived than that of a medical man who, having long struggled in the pursuit of his arduous profession with benefit to his fellow-creatures and with honour to himself, is nevertheless overtaken and crushed by sickness, misfortune, or old age, or cut off in the prime of life, before he has had time to make provision for his family, and his widow and orphans are thus brought face to face with that dismal want and sorrow, to the alleviation of which in others so large a portion of his own life had been devoted."

Professor Czermak of Pesth has lately made what promises to be a valuable addition to our means of examining the condition of mucous membranes, in the form of a laryngoscope or laryngeal speculum. The idea of viewing the throat and adjoining parts by reflected light was known, as M. Czermak acknowledges, to the late Mr. Liston, who on several occasions used a small mirror fixed on a stem for detecting ulceration of the glottis; and, in late years, several attempts have been made to construct a laryngoscope, which have, however, failed in consequence of ordinary daylight being employed. M. Czermak, by an ingenious contrivance, adopts the principle of the ophthalmoscope of Helmholtz and Ruete, using artificial light to produce illumination. By means of his apparatus, M. Czermak states that he can bring into view the lowest part of the pharynx, and even, where the glottis is open, the trachea as far as its bifurcation. An account of the instrument and its application has recently been laid before the Academy of Medicine and the Surgical Society of Paris.

Association Intelligence.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE.
Bath and Bristol. [Ordinary Meeting.]	White Lion, Bristol.	Thurs., April 26th, 7 P.M.

LETTERS AND COMMUNICATIONS.

Letters or communications for the Journal should be addressed to Dr. Wynter, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the Journal, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

Reports of Societies.

EPIDEMIOLOGICAL SOCIETY.

Monday, April 2nd, 1860.

B. G. Babington, M.D., F.R.S., President, in the Chair.

ELECTION OF OFFICERS.

The following officers were elected for the ensuing year:—*President:* Benjamin G. Babington, M.D., F.R.S. *Vice-Presidents:* Thomas Addison, M.D.; Sir B. C. Brodie, Bart.; Sir William Burnett, K.C.B., K.C.H., F.R.S.; Rev. Thomas Dale, M.A.; James Brown Gibson, M.D., C.B., Director-General of the Army and Ordnance Medical Department; R. D. Grainger, Esq., F.R.S.; Sir Charles Hastings, M.D., D.C.L.; Sir John Liddell, C.B., M.D., F.R.S., Director-General of the Medical Department of the Navy; John Nussey, Esq.; John Propert, Esq.; John Simon, Esq., F.R.S.; Sir Andrew Smith, M.D., F.R.S., K.C.B.; Thomas Southwood Smith, M.D.; Thos. Watson, M.D., F.R.S. *Treasurer:* Thomas Addison, M.D. *Secretary:* J. O. McWilliam, M.D., F.R.S., C.B., R.N. *Foreign and Colonial Secretaries:* Belgium, A. Sayer, M.D. East Indies, James Bird, M.D. Egypt and Syria, William Camps, M.D. France, Waller Lewis, M.B., F.G.S. Germany and Russia, Hermann Weber, M.D.; W. E. Swaine, M.D. Portugal and the Brazils, J. O. McWilliam, M.B., F.R.S., C.B., R.N. Sweden, Norway, Denmark, and Iceland, R. Gordon Latham, M.D., F.R.S. West Indies and North America, G. Milroy, M.D. *Other Members of Council:* C. J. B. Aldis, M.D.; C. L. Bradley, Esq.; A. Bryson, M.D., F.R.S., R.N.; W. D. Chowne, M.D.; Headlam Greenhow, M.D.; Colonel Hough; T. Hunt, F.R.C.S.; C. F. J. Lord, Esq.; J. F. Marson, Esq.; Charles Murchison, M.D.; H. Mapleton, M.D.; R. Nichol, M.D.; W. Odling, M.D.; J. N. Radcliffe, Esq.; B. W. Richardson, M.D.; Burdon Sanderson, M.D.; E. C. Seaton, M.D.; Spencer Wells, F.R.C.S.

SOME ACCOUNT OF CHOLERA AT GUILDFORD IN 1854.

BY H. S. TAYLOR, ESQ.

[*Read by* Dr. McWilliam.]

Mr. Taylor's description of cholera as it appeared at Guildford was taken from a register of cases kept during an epidemic that prevailed there for the first time in 1854; a very few cases only, of the sporadic kind, and two or three imported cases, having been observed in the general epidemics of former years. He commenced by stating that a history of such an epidemic might be interesting even when the number of persons attacked is inconsiderable, inasmuch as a limited area offers greater facilities for investigation than larger towns with shifting populations and more extended intercourse.

At the invasion of Guildford by cholera, the general health of the place was good, and diarrhœa was not more prevalent than usual at the same season. The sanitary condition of the town, however, was not creditable, but perhaps not worse than other small towns. The natural drainage is unusually good; but there is no sewerage, properly so called, the cesspool system being all but universal; while the main sewers, full of deposit in the lower levels, and discharging themselves into the canal above high water, are perfect magazines of foul air. The canal, too, which intersects the town at its lowest part, has become the receptacle of so much filth that its water is no longer drinkable; and for many years this locality has been notably more unhealthy, and the seat of fevers of a lower type, than other localities. As might have been predicted, this was the principal scene of the outbreak about to be described.

The first case of cholera (August 6th) was a healthy carpenter, aged 38, living about a mile from the town, in a row of small cottages close to the canal. He had had diarrhœa for three days previously, and died in eight hours after the accession of algide symptoms. A son of his had diarrhœa two days afterwards; but no other case occurred in this neighbourhood. The next case appeared on the 7th of August, at the staff-quarters of the militia depôt, a row of eight houses, standing forty yards from the canal, at a right angle with it, well drained and ventilated, and supplied with good well water, except in the two houses nearest to the canal, where it was found to have a most nauseous taste and smell. It was found, indeed, that the pumps of these houses drew from one well which had been sunk close to an old barrel drain, that brought down nearly half the sewage of the town, and contained a thick stratum of black fœtid silt, the soakage from which had saturated the surrounding soil, and filtered freely into the well. In these houses, there were no less than seven deaths from cholera within a fortnight, while only a single case of diarrhœa occurred in the other houses of the row, and that in the person of the schoolmaster, who had been engaged in a room in one of the first named houses. At the same time with these, another group of cases had appeared on the opposite side of the canal, in a row of cottages about a hundred yards below the staff barracks, but standing on an elevated terrace, on the bank of the canal. These cottages were small, badly drained, supplied with indifferent water, and much crowded. The first case was an engine-driver on the railway. His wife had diarrhœa first, contracted, as she supposed, in nursing a relative in London who died of cholera. On the 12th of August, the man was seized with vomiting and purging, and he died on the 15th. Other cases of the same kind followed, in this locality. There were now and then cases which were distinctly importations from London. These were among bargemen from Vauxhall. Cases also occurred in which the seizure was ascribed to contact with bedding and blankets in which chlolera patients had lain. From the 28th of August to the 20th of September, there was a cessation of the disease. On this date, however, a bargeman from Godalming was brought into the union with cholera, but he recovered. On the 11th of October, a fresh case was reported, in a public house where one of the bargemen from Vauxhall had died two months before. No cause could be assigned for this solitary case, except that the man was addicted to drinking, and had always a great dread of cholera. Mr. Taylor concluded by alluding to the outbreak of cholera at the village of Merrow, which favoured the view that, on this occasion, the disease was introduced, and afterwards diffused, by contagion.

ON CHOLERA AT WICK IN CAITHNESS DURING THE AUTUMN OF 1859. BY H. D. LITTLEJOHN, M.D., OF EDINBURGH; AND G. BANKS, ESQ., OF WICK.

Dr. Littlejohn (who was sent by the Board of Supervision at Edinburgh to inspect and report upon the condition of Wick during the prevalence of cholera there) describes Wick as situated on the banks of a tidal river of considerable size, presenting every advantage requisite to secure a first-rate sanitary condition; but as being, nevertheless, one of the dirtiest towns in Scotland. Wick, says Dr. Littlejohn, may be regarded as composed of the burgh proper, and of the outlying districts in the parliamentary boundary on the north side of the river Wick, and of Pulteney town, which is entirely situated on the southern bank. The burgh contains 1700 inhabitants, and is built upon a level surface, the most of which evidently at one time formed a portion of the channel of the river. The districts forming the rest of the parliamentary boundary are situated on the rising ground to the north, and also stretch towards the east. It was at once apparent that the drainage of the upper portion, possessing an excellent fall, must find its way into the river through the low-lying parts of the burgh; and that, if difficulty existed as to the drainage of the burgh, from its want of declivity, its sanitary condition must be very seriously interfered with by the sewage entering it from the higher parts of Wick. In proof of this, Dr. Littlejohn states that the first case of cholera occurred in Wellington Lane, in the burgh—a lane running at right angles to the river, and in the line of the natural drainage. On opening the drainage in the immediate vicinity of the house where these fatal cases were reported, it was found to be in a most unsatisfactory state, badly constructed, with a deficient fall, and containing a large quantity of most offensive semi-solid sewage material. Indeed, the whole drainage system on the north part of the town was in a bad condition. Accumulation of filth of all kinds was found in the back yard or courts. There was a want of privies, and a great defect in the water supply.

Pulteney town, which is of much more modern date than Wick, lies on the south side of the river. It consists of a low lying district, built upon what was formerly the course of the river, and of a still larger district, on a kind of elevated tableland, stretching southwards, and separated from the former by a declivity of some height. These two portions have received the names respectively of Upper and Lower Pulteney Town. Both are laid out with great regularity, and in the width and general arrangement of the streets present a favourable specimen of a modern town. A good system of drainage had been originally proposed and planned for Pulteney Town; but Dr.

Littlejohn's investigations, in association with Mr. Fisher, the surveyor, soon convinced him that it had been very imperfectly carried out. That, in fact, while the main lines had been formed, comparatively few of the houses had any connecting drain with the street sewer, although in the plan all such connections with the houses were clearly marked out. The result was, that the gardens separating the streets, were made the receptacles of filth of all kinds, from stables, piggeries, byres, etc.; not collected, as in an ordinary dung-heap, but spread in a slovenly manner over a large space, thus presenting an extensive area of exhalation, and also for irrigation by rain. The water supply of Pulteney town is abundant; but although it undergoes filtration, it is so little relished, that the water used in the chief hotel has to be brought from a well on the north side of the river. Water has been introduced into but few of the houses of Pulteney town; consequently, there are few or no proper water-closets. This disease had in a great measure subsided before Dr. Littlejohn reached Wick; and although there were several cases of severe diarrhœa, which, without attention, would have passed into the graver malady, there was no actual case of cholera while he was there. During his stay, some very offensive nuisances were removed; a new drain was commenced in a filthy locality, and a choked drain was opened and cleansed; but the staff at the disposal of the inspector was altogether inadequate to the requirements of the case. Dr. Littlejohn's paper concluded, by a most careful and judicious series of recommendations for placing the towns of Wick and Pulteney in a permanently satisfactory sanitary condition, which we trust will receive attention in the proper quarter. He also acknowledged his obligations to Captain Tudor, R.N., Mr. Miller (town clerk), Dr. Banks, and Mr. McCormunk, for their services in furtherance of his inquiries.

Dr. Banks commenced his paper by stating that Wick had been visited by cholera, on three different occasions, viz.:—during the general epidemic of 1832, during the year 1849, and during the autumn of 1859. In this report Wick contrasts unfavourably with the neighbouring town of Thurso, which has only on one occasion been invaded by this scourge, and that during the general epidemic of 1832. Dr. Banks is of opinion that this greater liability of Wick to zymotic disease, can be accounted for, mainly, by the more filthy condition of the town, as ably pointed out by Dr. Littlejohn; in a considerable degree, by the influx in the summer, for the purpose of prosecuting the herring fishery (the only source of trade), of from five to six thousand people, for whom there is no accommodation beyond the ordinary resources of the place, thus occasioning a pernicious system of cramming together persons in rooms; and also, to some extent, by the occasional occurrence of an under average fishing season, which, limiting the good supply, and depressing the spirits, lays the constitution open to the attack of zymotic maladies.

Thurso, on the other hand, is comparatively clean, and altogether in a better sanitary condition; and it is subject to no sudden influx of population, and its trade is steady and equable throughout the year.

The first case of cholera at Wick occurred on the 7th of September, 1859; and from this date the amount of cases gradually increased until it reached its maximum between the dates of October 1st and 12th. There was then a lull of five days duration, when a few more cases occurred, and by the end of the month the epidemic may be said to have ceased. The symptoms and general character of the disorder were identical with those of the former epidemics. Some cases were preceded by previous bowel complaint of variable duration, while in others the most grave symptoms appeared without any premonition. Some proved fatal within twelve hours; but the majority died in a typhoid state, which commonly supervened after the more urgent choleraic symptoms had subsided.

From September 7th to October 12th, there were 45 cases, and 22 deaths. From October 12th to October 25th, 17 cases, and 5 deaths. From October 25th to October 31st, 6 cases, and 1 death. From October 31st to November 7th, 2 cases, and no death. Total—70 cases, 28 deaths. The total population of the district is 7000.

With respect to the cause of the cholera at Wick, which was ascribed by one of the resident medical men to importation from without, Dr. Banks considers that there is no ground for believing that it was other than of local origin.

Dr. McWilliam stated that he had received a communication from Dr. Ellison, another practitioner at Wick, which confirmed the views of Dr. Banks with reference to the recent outbreak.

A discussion followed the reading of this paper, in which Dr. Milroy, Dr. Seaton, Mr. Radcliffe, Dr. Babington, and Dr. McWilliam took part.

OBSTETRICAL SOCIETY OF LONDON.

Wednesday, April 4th, 1860.

Edward Rigby, M.D., President, in the Chair.

The President informed the Fellows present that the volume of *Transactions* would be distributed in the course of a few days.

Hydatidiform Degeneration of the Ovum. By Grailly Hewitt, M.D. Dr. Hewitt exhibited a specimen of the above interesting pathological condition. It had been presented to him by Dr. R. Uvedale West, of Alford, and was about the size of a goose's egg. When it came into Dr. Hewitt's possession it was complete, but much torn and dismembered. In the restored condition in which the specimen was exhibited the relation of the several parts was very obvious, and it was now perfect. The decidua was very much thickened, and formed a cavity from the superior part of which the altered chorion villi projected downwards, and during life filled the cavity formed by the decidua. The ovum was about the same *age* as the one described by him in the volume of *Transactions* now before the Society, but had remained much longer in the uterus; some of the vesicles were as large as grapes. The patient had a child nine months before expelling this product, and had had a "show" about every seven weeks since, her child having died when a few weeks old. Finally she had hæmorrhage for three weeks, which ended in its expulsion. With reference to the nature of this change in the ovum in these cases, he had no doubt that the embryo perished first, the subsequent changes being a result of continuance of *growth* of the chorion villi, while their *development* was arrested.

Dr. Routh inquired whether watery, alternating with bloody discharges, had been present in this case?

Dr. Grailly Hewitt stated, in reply, that no watery discharges had, he believed, been noticed. Such discharges only attended a stage of the growth later than that observed in the present instance, and were consequent on bursting and discharge of the contents of the vesicles. As to the question of diagnosis, the presence of these watery discharges was not pathognomonic; for in cases of polypus, watery, alternating with bloody discharges, were occasionally observed.

Complete Obliteration of the Canal of the Small Intestine by Fœtal Peritonitis; Amussat's Operation. By R. Druitt, M.R.C.P. An infant was born on the 25th December, well nourished, covered with vernix caseosa, vigorous, and well formed, yet having the upper part of the abdomen swollen, and the superficial veins much enlarged. The first twenty-four hours of its life were passed pretty well; it cried, sucked, and slept as usual. Then came on fits of pain, restlessness, and sickness. Dr. Druitt found at this time that urine had passed abundantly, but no motion. The anus was well formed, and admitted the finger; and several attempts were made to procure a motion by injections and inflation of air, but in vain; these attempts, however, pacified the child, who strained, and seemed desirous of relieving her bowels; but it appeared as though the bowel admitted nothing to pass higher than the rectum. Six hours later, the symptoms had become more urgent, and the vomiting stercoraceous; and Mr. H. Lee, who was consulted, consented to perform Amussat's operation for opening the descending colon. A transverse incision was made in the left loin, and many cautious attempts were made to reach the bowel, but without avail, as no fæcal matter passed. The child survived till the fifty-sixth hour, taking no nourishment, and suffering pain and vomiting by fits. A *post mortem* examination the next day revealed quite enough to explain the symptoms and the difficulty of the operation. About the junction of the upper and middle thirds of the ileum there was a portion of bowel tied together in a coil by a multitude of adhesions, which matted it together and united it inextricably to the mesentery. About this spot the jejunum was immensely distended; below it, the remainder of the ileum and the whole of the large intestine were pale, small, undeveloped, and empty. This lower empty portion of the intestines was entirely discontinuous with the upper, and began by a distinct rounded extremity. In fact, it was evident that the child had been the subject of fœtal peritonitis, and that one band of adhesion had acted on the bowel precisely as a ligature does on an artery; the canal had been divided and obliterated, and the

several extremities had healed up. The good nutrition of the infant, and the abundance of vernix on the skin, spite of the condition of the digestive tube, deserved notice. There was no trace of syphilis or other disease in the mother, save an attack of colic just before quickening.

FOUR CASES OF MENORRHAGIA TREATED BY INJECTION, OR SCRAPING OF THE UTERUS AND INJECTION COMBINED: WITH REMARKS ON THIS PLAN OF TREATMENT. BY C. H. F. ROUTH, M.D.

After premising that the following cases had been under treatment before admission into the hospital, but unsuccessfully, Dr. Routh proceeded to relate them:—

Case I. A. B., married, with a family, aged 46, had menorrhagic menstruation for upwards of a year, on two occasions so violent as to necessitate active treatment to save life. Examination per speculum revealed bunches of small polypi within the cervix. The uterus was dilated by a sponge tent, and the polypi were scraped away by a gouge. No injection was used. Relief was complete.

Case II. M. P., married, with a family, aged 34, had menorrhagia succeeding defective menstruation. She was actively treated. No polypi were visible on examination, but there was a softened and highly vascular uterine mucous membrane. Dilatation by sponge-tent, scraping off the lining membrane, and injection of compound tincture of iodine were followed. Some uterine pains followed, but the cure was complete.

Case III. M. L., married; no children; had menorrhagia of two years, following metritis. She had been treated in another hospital, but unsuccessfully. Hæmorrhage was excessive after the introduction of the sound. No polypi were visible, except after dilatation; they were simply removed, and iodine was injected. In a fortnight she was much improved; but the catamenia still being too copious, the operation was repeated; the uterus was scraped; another polypus was removed; the uterus was injected again with tincture of iodine. The cure was complete.

Case IV. E. R., aged 45, married, had menorrhagia of eighteen months duration. Her face was quite blanched. Examination revealed a blanched uterus, but no polypi till after dilatation. A polypoid mass was then removed by a gouge, and two again subsequently. The injection was used as before. The cure was complete.

In remarking on these four cases, samples of many, the author stated the cases only went to prove the advantages of injection and scraping of the uterus, when combined—a mode of cure first introduced into London practice by his colleague, Dr. Savage. The use of both plans separately had been long known, but rarely practised, in England. The dangerous effects of injections were so much dreaded, that they were seldom employed. The author quoted several opinions, amongst others a very decided one from Dr. Simpson. He ventured to state that the danger was owing to the injection being used without providing means for *its free egress*, which could only be done by the previous employment of the sponge-tent. The occurrence of peritonitis, he believed, was not due to the passage of fluid up the Fallopian tubes, in proof of which the author adduced an experiment of the late Dr. Chiari, of Vienna, in which immediately after death in a female, the most powerful force applied by a syringe fastened to the os uteri failed to push the fluid in the Fallopian tubes. The peritonitis in these cases, he believed, was due to penetration of the injection through some ulcerated spot in the veins of the uterus, or simply to sympathy. This last view was exemplified by a case in which Dr. Routh merely injected warm water, which was retained for a time in an enlarged but indurated and retroverted uterus. This produced intense pain until rejected, which might have gone on to inflammation; *à fortiori* would this apply in a case where an astringent injection was used. In this case no sponge-tent had been previously employed. Dr. Routh had used several fluids as injections—compound tincture of iodine, tincture of muriate of iron, strong solution of tannin, etc. In relation to the operation of scraping off the polypi, with or without the entire mucous membrane of the uterus, several instruments now in vogue were noticed: Dr. Simpson's, Sir C. Locock's, Récamier's, and two modifications of the author's, which he preferred as safer. There were two conditions of uterine mucous membrane he had observed in these cases of menorrhagia: the villous membrane without polypi, and that with small polypi, which last he looked upon as only hypertrophied villi, in proof of which he adduced microscopical examinations. The author then detailed the mode of dilatation by sponge-tents, which dilatation was not to say complete until (having drawn down the uterus by a special hook provided for that purpose, which was shown) the index-finger could feel all the surface of the uterine mucous membrane to the fundus, and then any polypi could be felt and removed. The cure was completed by the injection, which set up a new and absorptive action in the uterus. If the scraper were too sharp, and allowed to cut too deep, peritonitis would probably occur. But a much more superficial scraping sufficed if the injections were also used. Hence one of the uses of the combination of these two plans. It had been shown by his friend, Dr. Savage, that the sponge-tents alone would often suffice to set up this absorptive action, and thus diminish the volume of an enlarged uterus. So also, by stimulating its contractile power, they favoured the expulsion of any injection subsequently used. The author did not recommend this plan of treatment in every case, but in all those cases where other derivative and general treatment having failed, the practitioner was called upon to do something more.

Dr. Grailly Hewitt inquired whether Dr. Routh had any experience as to the effects of his operation on the procreative powers of the patient. Although he concurred in the propriety of removing any excrescences of the mucous membrane when such were present, he could not see how any such complete removal of the mucous membrane as that practised by the author could be necessary or even justifiable.

Dr. Tanner remarked, that he considered it to be a matter of duty to make a few observations on the paper which had just been read. He felt this chiefly because for six years he had been connected with an institution of a similar kind to the one to which Dr. Routh was attached, and he had not met with cases which demanded the very active treatment recommended by that gentleman. It was, of course, no uncommon circumstance to see women suffering from great congestion of the uterine mucous membrane, the result of chronic inflammation; but he believed that they could be cured by simple and safe measures, and especially by rest, and the administration for some time of small doses of the bichloride of mercury. He would never think of scraping off the mucous membrane, and then injecting the compound tincture of iodine into the uterine cavity, in such cases. With regard, more particularly, to the use of injections into the uterus, Dr. Tanner agreed with Professor Simpson that their employment was fraught with danger. Such a proceeding might be adopted six, eight, ten or more times, and no ill result follow; but he apprehended that every now and then alarming symptoms would set in, which were likely to end fatally. He had seen one instance in the practice of another gentleman, where the injection of a weak solution of nitrate of silver into the uterus caused great pain, which lasted some time, and was only subdued by large doses of opium. Even in one of Dr. Routh's cases there had been symptoms of tetanus after the scraping and injection. If caustics were required in the treatment of softening of the uterine mucous membrane—and he by no means meant to assert that they were—why not use the solid nitrate of silver? We are often told that gaseous injections into the uterus are valuable in relieving pain, and that their use is unattended with danger. Yet Scanzoni relates the case of a woman, who was about to undergo amputation of an hypertrophied cervix uteri. Carbonic acid was injected into the cavity of the uterus by a suitable apparatus; but hardly had some cubic inches of the gas penetrated into the cervix, when the patient screamed out, and said she felt the air rushing into her abdomen, neck, and head. Tetanic convulsions then set in, and, after great suffering, death ensued in two hours. This case required no comment.

Dr. Granville had no experience of "scraping" the uterus. During his practice, he had not been accustomed to treat the cavity of the uterus with such disrespect as had been shown in more recent practice. To remove the mucous membrane for a possible good would be more than he would risk. As to injections, in some cases he had seen no effect produced, whilst in others he had witnessed very disastrous results.

Dr. Rogers was for some time unwilling to use injections into the cavity of the uterus. He had, however, for some years past employed them, and in no case had any serious result followed. With respect to "scraping", he had no personal experience to offer; but he had seen Dr. Routh's practice, and knew that no bad results had apparently followed therefrom.

Dr. Routh, in reply to Dr. Hewitt, stated that he had not followed these cases to know of their subsequent parturitions; but as these patients subsequently always menstruated regularly, and as in every labour the mucous membrane of the

uterus was expelled as decidua and again produced, there could be no doubt that after scraping it off by the gouge it could be reproduced in like manner; and so procreative power, he did not doubt, was in no way impaired. In reply to Dr. Tanner, he could only say that softened mucous membrane of the uterus, or hæmorrhoidal membrane, such as described by Dr. Simpson, did exist, and apart from inflammation. He had seen such cases. In the one described in his paper, where menorrhagia coexisted with procidentia uteri, and where the mucous membrane was perfectly visible, there could be no doubt of it. There was no danger in the operation, any more than in scraping any ordinary mucous membrane, nor even in injection of the same, if it had been previously fully dilated. In such cases, the uterus was in the same position as a vagina. The danger was in injecting an *undilated* uterus, where, because the injection was retained, it created irritation and subsequent inflammation. Sometimes, it was true, injection produced temporary sickness and faintness; these symptoms might frighten one uninitiated, but they were purely nervous symptoms. In some cases, even the mere passing of a sound would produce like symptoms. In the case mentioned by Dr. Tanner, there was no explanation of the death. If the case was that of a pregnant woman, as Dr. Hewitt stated, the death might be due either to the passage of carbonic acid in the uterine veins, or to perforation of the uterus. He had twice seen the uterus perforated by a common sound. In these cases no bad result had followed. In a third instance, which he had heard of, he believed death had resulted. At any rate, carbonic acid was commonly introduced into the uterus now-a-days, and with perfect safety. He had only instanced four cases as examples; but his experience was not limited to six, or eight, or even ten. In his own and Dr. Savage's practice, he might have seen some thirty or forty cases, and all did well. But he (Dr. Routh) had not said that he treated all cases of menorrhagia in this way, but only those which had resisted other treatment. Many of these had been treated by medical men of large metropolitan hospitals, and these gentlemen certainly did not lack brains. If he, therefore, had cured in this way, speedily and without danger, several such cases, surely the plan was one worthy of the attention of the profession. After thanking Dr. Granville and Dr. Rogers—the former for giving him the credit of doing well, perhaps, although he had not practised the operation himself; and the latter for having given him the evidence of his own observation and practice in similar cases—Dr. Routh said he hoped the plan would be tried more generally, but that all who did so should remember that the injections were only safe when the uterus had been so dilated by sponge-tents as to admit of the free egress of the fluid injected.

MEDICAL SOCIETY OF LONDON.

Monday, April 16th, 1860.

C. H. Rogers-Harrison, Esq., Vice-President, in the Chair.

CLINICAL DISCUSSION.

Blow-pipe for maintaining a continuous Blast. Mr. Paine, of Great Russell Street, exhibited an apparatus called the India-rubber diaphragm blow-pipe, to be used by dentists, mineralogists, etc. The principle of the instrument consisted in the insertion of the blow-pipe through the tube into the centre of the flame, so as to produce an intense heat, capable, as was demonstrated to the Society, of fusing copper and silver coins.

Specimens of Chronic Rheumatic Arthritis. Mr. Canton exhibited specimens of rheumatic gout, or chronic rheumatic arthritis, in the joint of the lower jaw. He believed that no instances had been hitherto brought forward of the disease as affecting this joint. In the specimens brought forward, all the peculiarities which the disease generally manifests in other joints were well shewn. The disease generally appears under two forms in bone, either producing an enlargement or an atrophy. Many speak of the changes met with in the neck of the thigh-bone, etc., as senile; but Mr. Canton held that such changes were not in reality senile; and that, in the thigh-bone, the utmost change that the bone undergoes in old age is some slight absorption of its neck; it does not undergo the change of obliquity that is supposed. But if there is some amount of rheumatic gout, then the neck of the bone assumes a more horizontal position. It was important to attend to these changes, inasmuch as mistakes have been made even by practitioners of high repute as to the occurrence or non-occurrence of fracture of the neck in some cases. A slight injury, for instance, may be applied to the joint; there may at first be no shortening, but, after the patient has risen from the bed to which he has been confined some time, there is found to be shortening of the leg, which is erroneously attributed to intra-capsular fracture. In the lower jaw, the changes commonly described as senile are not senile at all; sometimes they do not occur in old persons at home. Commonly the change is symmetrical; but sometimes it occurs on one side only. Professor Smith of Dublin, to whom Mr. Canton had applied for communication on the subject, had kindly sent him the specimens which he had collected in illustration of the disease in various joints. The disease is very rife in Ireland; and the specimens sent by Dr. Smith exhibited it in a high form. Dr. Humphry had also referred to the subject in his recent work on the skeleton, and had mentioned a case in which he had found it necessary to remove one of the condyles of the jaw. Dr. Smith had also sent a specimen of the disease occurring in the tarsal bones of the Irish elk, shewing the alternate ridges and depressions produced by the deposit in a hinge-joint.

Dr. Routh said that the late Mr. Liston had, at any rate in his lectures, described the cases in which a blow of the thigh was sometimes ultimately followed by shortening of the leg.

Mr. Canton had only wished to call attention to the fact that the liability to fracture of the neck of the thigh was described by writers (even of recent date) as a senile change.

The Chairman asked whether he had known the antecedents of any of the individuals to whom the jaws exhibited belonged.

Mr. Canton replied in the negative.

The Synthesis of Cataract. Dr. Richardson made a second communication on the synthesis of cataract. On the last occasion, he had brought forward forty-six experiments, showing that a peculiar kind of cataract was producible, as Dr. Mitchell of Philadelphia had first pointed out, by the introduction of sugar into the bodies of animals. Since that time, he had made experiments with other substances, which experiments he now proceeded to describe.—*Glycerine.* Two experiments were performed with glycerine. In the first, one drachm of glycerine being injected into the dorsal sac of a frog, there was produced, in three hours, posterior opacity of the lens. In a second experiment, a drachm and a half was injected, which caused death in six hours, without cataract.—*Alcohol.* A drachm of absolute alcohol, injected into the dorsal sac of a frog, caused death in two hours, with extraordinary shrinking of the body, and distinct double cataract posteriorly. Half a drachm of absolute alcohol, injected into the dorsal sac of another frog, caused death in six hours, with distinct cataract, but, singularly enough, on one side only. The cataractous condition produced by glycerine and alcohol resembled that produced by sugars.—*Chloride of Sodium.* By introducing into the dorsal sac of a frog from two to three drachms of a solution of chloride of sodium, of specific gravity 1150, the animal was rendered tetanic; and, in twenty minutes, the limbs were drawn immoveably towards the body, but jactitation of the muscles continued for an hour, when the animal died. Distinct cataract was produced in both lenses before death. In another experiment, a drachm and a half of the solution was used: the same symptoms followed, but more slowly. Distinct cataract resulted. In a third case, one drachm of the same solution was injected: death occurred in two hours, marked cataract having previously appeared. In a fourth case, half a drachm was used: death occurred during the third hour, with the same signs of cataract. In a fifth case one drachm of solution of chloride of sodium, of specific gravity 1050, was thrown in. In three hours there was distinct double cataract: the animal was immensely shrunken, and the skin was dry, almost like parchment. Placed in water, the animal recovered; and, the water being frequently changed, the cataract entirely disappeared in fifty-three hours. Cataract was reproduced in this animal, again removed, and again reproduced. Dr. Richardson presented the animal, with the cataract. The character of the cataract produced by chloride of sodium seems to differ materially from that produced by sugar. The lens is much firmer, and the opacity extends through the whole structure. The lens resembles one that has been boiled.—*Iodide of Potassium.* From the chemical analogy between chloride of sodium and iodide of potassium, Dr. Richardson had used the latter salt in the same way; the general symptoms produced were very similar, except that the cataractous condition did not result—at least, so far as his experiments had gone.—*Acid Urate of Soda.* From the fact of the insolubility of the urates, Dr. Richardson said that he did not expect that a cataract could be produced by the introduction of this substance into the blood. He did not conceive, that is to say, that any osmosis could be established by that salt; but an accidental experiment had led him to try what

could be done in this direction. On March 2nd of the present year, he had commenced to administer to a well fattened and healthy bitch, the acid urate of soda, in doses of two drachms daily, with her food. His object was, to ascertain whether any affection of the joints would be produced. At this time, she had taken nearly a pound of the urate, with no effect whatever on the joints; but, within the last three weeks, with distinct and rapidly increasing indications of double cataract. The animal was exhibited to the Society. Acting on this suggestion, the author had tried to produce the same effect on frogs, by charging them with the urate of soda, but without any similar result. The occurrence of cataract in the larger animal might therefore be a coincidence; but Dr. Richardson was inclined to think that it was an indirect effect of the urate; that is to say, he believed that the urate was decomposed in the digestive process, and changed probably into a lactate or other soluble salt of soda; which, being conveyed into the blood, produced the cataractous condition. In proof of this, he showed that a solution of lactate of soda, of specific gravity 1060, produced cataract in frogs when injected. Dr. Richardson drew the following conclusions from the experiments:—1. In addition to the sugar-cataract, there is producible what may be called a saline cataract; 2. The appearances of the cataracts as produced by different solutions vary; thus the cataract produced by chloride of sodium differs from that produced by grape-sugar; 3. The same cataractous appearance can be produced in a clear lens, after removal from the body, by immersion in solution of sugar, salines, etc.; 4. As the cataractous appearance is modified by the density of the producing body, and is removable by reversing the conditions which have led to it, and as it is producible in a clear lens removed from a body, it is a demonstration that the cataract induced in the different animals is a purely physical—that is to say, osmotic—change.

Protective Power of Vaccination during Exposure to Small-pox Infection. Mr. Streeter mentioned a case in which he had attended three young persons not vaccinated, and a servant, who had an attack of variola after vaccination. The disease broke out on March 12th, but did not show itself plainly until the 16th. The next day, an attempt was made to vaccinate the two elder of the family (aged 16 and 18). On March 19th, neither of the arms had risen; and Mr. Streeter performed vaccination again. The younger sister, aged 14, had variola. On March 26th, the arms had risen in one place each, but without areola or induration. On the 28th, the areola appeared in the second. In the case of the brother (aged 18), no areola took place, and he had a severe attack of variola, but recovered. Mr. Streeter observed, that it is not often that vaccination performed so late after exposure protects—especially so late as the seventh day.

Editor's Letter Box.

POOR-LAW MEDICAL REFORM.

Letter from Richard Griffin, Esq.

Sir,—The Poor-law medical officers and others, assembled at a public meeting on April 12th, unanimously passed a vote of thanks to you for the valuable aid you have afforded them by the gratuitous insertion of an extensive correspondence on Poor-law Medical Relief, and for the series of leading articles you have written in aid of the cause of the much oppressed Poor-law medical officers. In this vote of thanks I cordially join; as no man in the profession knows better than myself the readiness with which, during the last four years, you have gratuitously inserted all communications addressed to you in furtherance of the cause, and the invaluable aid you have rendered us by your leading articles.

On the day succeeding the general meeting, I had a long interview with Mr. Pigott at Heckfield; and I have since sent to him written amendments on the Bill, which will, I trust, meet the objections of all reasonable men. For instance, I have proposed so to alter the Act that it is impossible for two officers to be appointed to one district. It is also proposed to add to clause 37, "But nothing herein contained shall have the effect of displacing any of the present medical officers of health; but those already appointed shall continue in office, subject to the regulations of the Privy Council, and become permanently appointed in the same manner as is provided for Poor-law medical officers in sec. 8 of this Act." It is also proposed to have inserted in clause 38, on sudden deaths, "Provided, nevertheless, that should the Registrar have reason to believe that any registered medical man, who is resident within five miles of where the deceased is lying dead, has been his usual medical attendant, although not immediately preceding his death, then it shall be the duty of the Registrar to direct his order of inquiry to him instead of to the district medical officer."

I trust that these various alterations will meet the views of the profession generally; and that there will be no dissension amongst ourselves. If there must be a fight (and most assuredly there will be one), let it be with the guardians, and not with our medical brethren.

The Bill now before the House was set down for a second reading last Monday; but, as it was a Government night, Mr. Pigott had but little expectation that it would come on, and, from a letter I have received from him this morning (Tuesday), I find that he has, at the request of Mr. Villiers, and from the fact that so much business is before the House, put off the second reading until Friday fortnight, May 4th.

Knight, in his *Official Advertiser*, says: "It does not appear that the Bill has the concurrence of the Poor-law Board; and they have transmitted copies to the several boards of guardians for their consideration: and it is not improbable the second reading will be postponed, in order to afford time for the boards of guardians and the country generally to express their views on the subject of the measure." I have little doubt from the foregoing quotation, and from private information I have received, that we shall have to encounter considerable opposition. It is therefore the duty of the profession without delay to petition the legislature, and also to privately inform the members of Parliament that the Bill, though it lessens the grievances of the Poor-law medical officer, is in truth a Bill for the poor man and the rate-payers, as its tendency is to lessen pauperism, and thereby to cause a diminution of the rates. I firmly believe that, if the guardians could see the matter in its true light, they would heartily join in support of the measure; let it be the task of the Poor-law medical officers to enlighten them.

The clause making Poor-law medical officers sanitary officers is most valuable, as preventive and curative medicine ought to be allied. That clause alone, if carried, would save thousands of lives annually, and prevent an increased amount of suffering to the poor. It would also tend to lessen the burden of the rate-payers.

I am, etc.,

Richard Griffin.

12, Royal Terrace, Weymouth, April 17, 1860.

THE ROYAL COLLEGE OF SURGEONS.

Letter from John Postgate, Esq.

Sir,—I beg to enclose you copies of a correspondence between Mr. Scholefield, M.P., and myself, respecting the recent admission of members by the Royal College of Surgeons.

Since I received Mr. Scholefield's note, I have seen him on the subject, and have arranged with him to call the attention of Parliament and the Privy Council to the matter, unless action is shortly taken by the General Medical Council.

I am, etc., John Postgate.

Birmingham, April 14th, 1860.

1. *Mr. Postgate to W. Scholefield, Esq., M.P.*

Birmingham, April 9th, 1860.

Dear Sir,—At a special meeting of the General Committee of the Birmingham and Midland Counties Medical Registration Association, held last Thursday, to take into consideration the conduct of the Council of the Royal College of Surgeons of England in admitting to the membership of the College persons who have not gone through the usual course of professional education, thereby qualifying individuals for registration as surgeons in direct contravention of the Medical Act,—I suggested that some member of Parliament (seeing that we have had no satisfactory reply from the College in answer to our communication) should inquire in the House of Commons of the Home Secretary whether these proceedings are sanctioned by the General Medical Council appointed under the recent Act for the promotion of medical education. I also said I had little doubt you would readily ask the question, and promised to communicate with you as chairman of the meeting, and state the nature of the abuse.

I need hardly, I think, inform you that the object of the Medical Act is to obtain for the public the highest possible

amount of medical and surgical skill, as well as distinguish by registration the qualified from the unqualified practitioner. Now, confining myself to the practice of surgery, a knowledge of practical anatomy is essential, and equally so is a thorough training in surgical manipulation in the wards of a large infirmary. A candidate must undergo this course of study, however fit naturally he may be for a surgeon. Without it, he might say from book knowledge what ought to be done, and be declared, after a verbal or written examination, capable of doing it; but he would fail altogether in practice, and only become competent after observing the results of his crude experiments on the luxated limbs and broken bones of his patients.

I cannot but regard this step of the Council of the College of Surgeons as detrimental to the public, by ranking these half-made surgeons in the same class with those gentlemen who have devoted much time and considerable sums of money whilst pursuing the preliminary professional education. I hope, therefore, you will see with me the necessity for asking Sir George C. Lewis in Parliament, as soon as may be—

1. Whether the recent admission by the Council of the Royal College of Surgeons of England of persons who have not undergone the required professional education to membership is sanctioned by the General Medical Council appointed under the Medical Act.

2. If not, whether the General Medical Council intend to put in force the powers vested in them by Clause xx of that Act, having reference to cases of this description. Should you do this, you will oblige the Medical Society, and very many members of the profession who feel injustice done them.

Yours faithfully, John Postgate.

Wm. Scholefield, Esq., M.P., Reform Club, London.

II. *Mr. Scholefield, M.P., to John Postgate, Esq.*

Minories, April 11th, 1860.

My dear Sir,—I am not at all clear as to the duties of the Medical Council, or as to the connexion of that body with the Home Secretary and his functions. Please let me have a little information on these points (I have not got the Medical Act by me); and, if I can satisfy myself that we are right in applying to Sir Cornewall Lewis, I will do so in the way you point out. I am, my dear sir, yours truly,

William Scholefield.

J. Postgate, Esq.

THE ASSOCIATION, THE POOR-LAW BILL, &c.

Letter from John Dix, Esq.

Sir,—Our Branches being, as I have said, the great attraction of the Association—"at once our means of strength and our theatre of action"—it follows that the Association might be rendered more popular, its power increased, and its sphere of usefulness largely extended, by the establishment of more Branches, and by more frequent Branch meetings; which may be effected in this wise.

Scattered throughout the kingdom are numerous medical societies, instituted for various special objects, some scientific, some political, as indicated by their various denominations, pathological, microscopical, medico-chirurgical, ethical, protective, registrative, etc. How easy would it be to absorb all these, and to incorporate them with the British Medical Association, if this society were actively engaged upon these various subjects, and if occasional special meetings of its Branches were held for each of the special objects embraced by these different societies. Why, for instance, should not each Branch have its pathological meetings, its microscopical meetings, and so on? Surely this would prove a "recruiting element" of no mean value. Some would join the Association for the sake of one subject, and some of another; and so one single united and organised society would supersede the present disjointed, impracticable state of things.

The desired amalgamation is all the easier from the circumstances that, in most or all of these societies, are to be found a few members at least of our Association to act as negociators or canvassers. *If they could say*, "See, here is a great central Association, the most important medical body in the kingdom, working at the very subject for which we exist. Let us unite ourselves to it; it must be much to our advantage, *and will cost us no more than our present subscription.*" Ah! but "there's the rub"; there is again that *horrid old stumbling-block*, the Journal, with its guinea subscription. Two or three weeks ago, you, sir, raised the inquiry, "Whom shall we hang?" "I also (as Dr. Stewart says) humbly put the question, but cannot pretend to answer it."

Other professional matters there are which might make the Association attractive to non-members. Take, as an illustration, the subject of "Poor-law medical reform", as it is called—a subject of peculiar, because of pecuniary, interest to large numbers of the profession, both within and without the pale of the Association. This, by the way, is one of the matters to which the Committee on Medical Legislation promised at the last annual meeting "to devote their careful attention during the next year". This committee, having reported of themselves that they had been doing nothing all the past year, asked to be reappointed, with certain additions, to aid them in this arduous work. Thus, Mr. Griffin "consented to be added to their number", with special reference to this subject. And what, may I ask, have they been doing? I trust, nothing: for that would be far better than being in any way responsible for the *abominable* Bill now before Parliament, the great principle of which is to rob the many for the benefit of the few.*

Yet surely it ought to be in the power of this committee to redeem its pledge of "endeavouring to devise some measure" on the subject. Suppose, then, that a few months ago their secretary had sent to all the local secretaries of the Association such a circular as this:—"Sir, I enclose you a copy of a draft Act of Parliament on the subject of the medical Poor-law. Will you, as soon as possible, arrange a special meeting of your Branch, for the consideration of this important subject? It is thought desirable also that a special and cordial invitation should be sent to all Poor-law medical officers resident in your district, whether members of the Association or not, urging their cooperation. Your attention is particularly directed to the following points, on which it is hoped that definite resolutions will be agreed to. These, when forwarded to me, will be examined by the committee, and collated with those of other meetings, by which means we trust," etc., etc.

By these means, sir, they would speedily have ascertained the real wants and wishes of the Poor-law medical staff; and they might ere this have presented to Parliament a measure "at once simple, just, and satisfactory to all concerned", to quote the terms of their own promise. Such a result as this can never be hoped for from that *phantom association* of which Mr. Richard Griffin is the only tangible reality. His present measure is surely too full of absurdities, inconsistencies, and injustice, to become law. It is, therefore, not yet too late for our committee to set about this matter: indeed, now is the time, so as to be ready for another session. But I can scarcely hope that they will take a hint from me.

Besides all this, should we not, by the course I have indicated, at once enlist all the Poor-law medical officers? Let them but see that we were actively bestirring ourselves for their benefit, that we were really endeavouring to put money in their pockets; and, alas for human nature! I do firmly believe, much as it grieves me to say it, that to these poor mercenary mortals this would prove a stronger and more effectual inducement to join the Association than the most determined and persevering attempts to cram knowledge into their heads by means of a weekly journal. I am now supposing that the change I recently proposed has been carried out; viz., that we should be allowed to become members of the Association without being compelled, *nolentes volentes*, to subscribe to the Journal also.

In this question, sir, I am certain of your individual sympathies, and I publicly claim your editorial support. I am free to confess that I have borrowed the idea from yourself. 'Tis but a very slight advance upon your own proposition (see Journal, June 25th, 1859) to admit local members with local privileges, by subscription to the Branches alone. I, like a bad tactician, pointed out the destructive influence of such a plan upon the Journal, and of course we have heard nothing more about it. But there can be no need of any such limitation of privilege on pecuniary considerations; for we learn from the last financial report that the "executive expenses" of the Association average 1*s.* 3½*d.* per head; so that 2*s.* 6*d.* would be an ample subscription for all the privileges of membership *except the* Journal. Of course this idea cannot be entertained. Our motto must ever be, *Floreat libellus, pereat societas*, or, as a Frenchman would say, *Vive la Journal, Gordam l'Association.*

Look again at the subject of registration under the Medical

* Those who are clamouring for this Bill, and petitioning in its favour, would do well first to study it, and understand its provisions. Mr. Griffin's own tables shew that more than 1700 medical officers are now receiving larger salaries than this measure proposes. About 1300 will receive an increase; but the rate of payment is altogether inadequate even for these. Let those who hope to gain, remember that they will do so at the expense of their neighbours. The Bill is replete with other absurdities equally gross.

Act. Observe the palpable evidence it affords of the impotence and unreadiness of our Association. This Act, whatever its worth to the profession, has been claimed as the progeny of the Association; and much crowing has there been over this solitary bantling—the puny and blighted offspring of years of incubation. Its effective working ought, then, to have been the peculiar care of the delighted parent. But how stands the fact? A feeble and abortive effort was made to induce the Branches to take up the local supervision of registration. The attempt utterly failed, and we were superseded in this our legitimate and bounden duty by mushroom societies springing up all over the kingdom to meet the pressing necessities of the case. And why, I would ask, did men flock to these societies? Not because of the wonderful importance of the subject; not because there was need of numbers—whatever work they have to do must devolve upon a small committee; but because they feel the need of association and organisation of some sort or other, and here was a cheap opportunity. Would not similar inducements have drawn them to our Association? Might we not have had them all, if we had taken up the subject? Might we not even now incorporate them with ourselves?

I am, etc., John Dix.

Hull, April 16th, 1860.

[As Mr. Dix has now set us all right, and scolded everybody, we must ask him to hold his hand: at least, if he will write respecting the Journal, he will perhaps permit us to suggest that his letters be directed to the Council of the Association, as no further purpose can be served by publishing them in these pages. Editor.]

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

** In these lists, an asterisk is prefixed to the names of Members of the Association.*

BIRTHS.

Of sons, the wives of—

Child, Gilbert W., M.D., Oxford, on April 16.
*Freeborn, R. F., Esq., Oxford, on April 13.
Hope, George C., M.D., at Edinburgh, on April 4.
*Sparke, George W., Esq., Mansfield, on April 11.
Wallace, Alexander, M.B.Oxon., at 23, Bedford Place, Russell Square, on April 9.
Wildey, W. W., M.D., Surgeon R.N., at Cosham, on April 17.

Of daughters, the wives of—

*Corbould, George G., Esq., Bristol, on April 14.
Mackenzie, W. Ord, M.D., Surgeon-Major 3rd Light Dragoons, at Dublin, on April 14.
*Skinner, Thomas, M.D., Liverpool, on April 12.

MARRIAGES.

Abbott, Charles T., Esq., Staff-Surgeon Royal Army, to Jeannie, daughter of *John F. Martin, Esq., Abingdon, on April 11.
Blomfield, Arthur W., Esq., third surviving son of the late Bishop of London, to Caroline H., third daughter of *Charles C. Smith, Esq., Bury St. Edmunds, on April 12.
Maclagan, the Rev. William D., Peterhouse, Cambridge, son of *David Maclagan, M.D., Edinburgh, to Sarah Kate, younger daughter of the late George Clapham, Esq., Great Baddow, at Paddington, on April 14th.
Norton, Selby, M.D., of Town Malling, Kent, to Ann Eliza, only daughter of *Henry M. Gould, Esq., Wateringbury, on April 11.
Tomkyns, William, Esq., son of the late William Tomkyns, M.D., London, to Martha, only daughter of W. C. Grafton, Esq., of Cheltenham, on April 10th.

DEATHS.

Cambell, John, M.D., Staff-Surgeon, at Corfu, aged 31, on April 1.
Gray, John R., M.D., at Howley Place, Maida Hill West, aged 58, on April 16.
Wilkin. On April 5th, aged 24, Frederick, fourth son of Henry Wilkin, Esq., Surgeon, Connaught Terrace.
Yates. On April 14th, at Brighton, aged 73, Olive, widow of the late Thomas Yates, M.D.

PASS LISTS.

Royal College of Surgeons. Members admitted at a meeting of the Court of Examiners, on April 13th:—

Burden, Henry, Belfast
Dann, Edward, Fermoy
Davey, Alexander G., Walmer
Drake, Thomas, Kingsclere
Everett, B. G., Warminster
Gimson, William G., Walton
Greenhill, Joseph R., Lewes
James, Edwin M., Shrewsbury
Lee, Frederic F., Salisbury
Manning, Frederick N., Milton, Northamptonshire
Maskelyne, G. H., Farringdon
Metcalfe, R., Hawes, Yorksh.
Pechey, W. C., Walthamstow
Pilcher, Jesse G., Dublin
Pilcher, William J., Dublin
Pyburn, James, Newcastle
Robinson, George H., Cork
Skegg, J., St. Martin's Place
Smith, Thomas, Stockport
Stockwell, F., Bruton

At the same meeting of the Court—

Godfrey, Charles Richard, of H.M.S. *Sea Lark*, passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the College: his diploma bearing date May 18th, 1855.

Monday, April 16th.

A'Beckett, Wm. G., Melbourne
Braddon, Charles H., Upton-on-Severn
Brumwell, George M., Monkwearmouth
Bush, D. W., Weston, Bath
Buszard, Frank, Lutterworth
Butler, Thomas M., Guildford
Cockcroft, John, Middleham
Collins, Charles P., Grafton Street, Fitzroy Square
Dean, Peter T., Lower Broughton, Manchester
Farrant, Samuel, Collumpton
Fernie, Edw., Wellingborough
Harding, John A., Bath
May, Henry, Birmingham
Moore, James F., Bradford
Sheridan, J. W., Killeshandoa
Sissons, William H., Hull
Walker, William, Romford
Warner, J., Leighton Buzzard
Williams, E. E., Llandyssil

At the same meeting of the Court—

Johnstone, James, of H.M.S. *Lizard*, passed his examination for Naval Surgeon. This gentleman had previously been admitted a member of the Edinburgh College, his diploma bearing date January 2nd, 1849.

Tuesday, April 17th.

Appelbee, Edw., Cropthorne
Barlow, William H., Oldham
Cooke, Robert, Swansea
Cotton, Thomas, Spalding
Dawson, William H., Exeter
Dean, Octavius, Manchester
Drewry, G. O., Fitzroy Square
Dow, Henry B., Bayswater
Duce, James, Wednesbury
Edger, William, Barnstaple
Evans, Herbert N., Hampstead
Grosjean, J. K. J., Regent St.
Hawthorn, Hy. J., Uttoxeter
Macnamara, James, Ealing
Maurice, O. C., Marlborough
Meade, Harry, Bradford
Parker, George F., Henley-on-Thames
Ridsdale, Hy. R. S., Torquay
Rogers, Frederick J., Helston
Stedman, James, Islington
Sutton, Henry G., Ilminster
Travers, William, Poole
Woodman, John, Exeter

Wednesday, April 18th.

Chisholm, Edwin, Sydney
Cooke, John, Newent
Cumming, John S., Limehouse
Dane, Thos., Barrow Hill Place
Eldershaw, Fred., Hoxton
Fortescue, George, Sydney
Gisburn, John J. W., Hunslet, near Leeds
Hadwen, Aurelius St. J., Waterloo Road
Harvey, Octavius C., Jamaica
Haynes, Allen L., Evesham
Kernot, Abraham B., Rayleigh
Lomas, Henry W., Belper
Lyons, Richard T., Madras
Nicholson, Edward, Brighton
Orwin, T. W., Haverstock Hill
Paine, William, Topsham
Ruttledge, W. F., Farringdon
Smith, Thomas B., Weaverham, Cheshire
Taylor, Frederic, Kingsclere
Ubsdell, Hy., Conduit Street

Austrian Medical Statistics. The Austrian empire contains 330 civil and 159 military medical establishments. The average number of patients admitted each year is about 500,000. There are 40 asylums, containing about 6000 inmates; 40 lying-in hospitals, which annually receive from 40,000 to 60,000 women; and 33 foundling institutions, containing 24,000 children. The number of medical men in Austria is 27,984, or 1 in every 1000 inhabitants. In France, according to the *Annuaire Roubaud*, there are only 18,000 medical men, being at the rate of 1 in each 2000 of the population. (*Journal de Médecine et de Chirurgie pratiques.*)

Medical Society of London. On Monday, April 23rd, at 8½ P.M., Dr. Thudichum will read a paper "On Intravasation, Embolia, and Cytastasis, as Causes of Cerebral and other Paralysis".